UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA - WESTERN DIVISION

HONORABLE STANLEY BLUMENFELD, JR., U.S. DISTRICT JUDGE

SANTA CLARITA VALLEY WATER AGENCY,   )
)
                    Plaintiff,   )
)
     v.   )   Case No.
)   CV 18-6825 SB (RAOx)
WHITTAKER CORPORATION, et al.,   )
)   Volume 11
                    Defendants.   )   (Pages 1143 - 1249)
_____)

REPORTER'S TRANSCRIPT OF TRIAL PROCEEDINGS
TRIAL DAY 6
WEDNESDAY, NOVEMBER 24, 2021
8:31 A.M.
LOS ANGELES, CALIFORNIA

_____

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UNITED STATES DISTRICT COURT

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1   WEDNESDAY, NOVEMBER 24, 2021; 8:31 A.M.

2   LOS ANGELES, CALIFORNIA

3   -oOo-

4   (In the presence of the jury:)

5   THE COURT: Good morning, everyone.

6   THE JURY: Good morning.

7   THE COURT: Let's go ahead and call the case.

8   THE COURTROOM DEPUTY: Calling Item No. 1, Case

9   No. CV 18-6825-SB, Santa Clarita Valley Water Agency versus

10 Whittaker Corporation.

11   Counsel, would you please state your appearances,

12 starting with plaintiff's counsel first.

13   MR. RICHARD: Good morning, Your Honor.

14 Patrick Richard. And with me -- Patrick Richard for plaintiff.

15 And with me are Ms. Scott, Mr. Gee, Mr. Stone, and

16 Ms. Micevych.

17   MR. GALLAGHER: Good morning, Your Honor.

18 Mike Gallagher for defendant. Along with me is Fred Blum,

19 Mr. Trowbridge, Mr. Lardiere, Mr. Bell, and Mr. Fryer.

20   THE COURT: Good morning, everyone.

21   Ladies and gentlemen, before we proceed, I did want

22 to provide you with some additional information now that I have

23 permission to do so with respect to my excusing Juror No. 7.

24 And the reason that I did not provide you with the information

25 that I'm about to provide you is because I had not yet spoken,

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1 indirectly, with Juror No. 7 to find out whether she had any

2 concerns about my sharing the information that I'm about to

3 share with you, and she gave me permission.

4   And so the reason that I excused Juror No. 7 was

5 that she had informed us that, on Monday evening, she had a

6 hard time going to sleep. And she woke up the next morning,

7 and she had some congestion, slight runny nose, and a light or

8 mild headache. So she wanted to know what we wanted her to do.

9   And in an absolute abundance of caution, I decided

10 to tell her not to come into the court and decided to excuse

11 her. And so she has also agreed, in an abundance of caution,

12 to get tested. So she did go and got a test yesterday. I do

13 not have the results back. The results, she said, would come

14 back within 48 hours.

15   I will get those results. I'm working with someone

16 in the court who's in touch with her to make sure that I get

17 the results. And if, in fact, she tests positive, I will let

18 you know immediately. I have your e-mails or my courtroom

19 deputy does or he will get them so that I can notify you.

20   If, in fact -- worst-case scenario, if she turns out

21 to test positive -- and, of course, I don't know. Her symptoms

22 are consistent with a cold, but there are a couple of symptoms

23 that, when you look at the various CDC symptoms that are

24 consistent with COVID, it's a long list, and those two

25 symptoms -- congestion, runny nose, headache -- are two of the

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1 many symptoms that are on that list.

2   But if she does, in fact, test positive, then what

3 will happen is that, if you are fully vaccinated, that is -- I

4 should first say, if you've had close contact with her, which

5 means that you've been in touch with her, in contact with her

6 for at least 15 minutes within 6 feet, then if she tests

7 positive and you are either fully vaccinated, which means that

8 you've had the two shots, not necessarily the booster, or

9 you've had COVID, you've actually had the virus yourself within

10 90 days of Monday, which is November 22nd, then you don't need

11 to quarantine. All you need to do is be vigilant, monitor your

12 own health. If you feel sick, if you have any symptoms, let us

13 know and we'll make sure that we're addressing that

14 appropriately to make sure that your health is maintained.

15   (Telephonic interruption.)

16   THE COURT: Sounds like there's just an alarm.

17 Let's wait a moment.

18   I do want counsel not only to have their phones --

19 this has happened a couple of times. I haven't said anything.

20 But you really need to make sure those phones are off. If this

21 happens again, they're going to have to be powered down

22 completely. And if it happens thereafter, I will have to

23 confiscate your phones or not allow you to come into the

24 courthouse with the phones.

25   Anyhow, to continue on -- and this happens, ladies

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1   and gentlemen. I don't mean to make too much of it. That's

2   why I ignore it when it happens a couple of times. But I just

3   need to make sure that everyone is aware that we need to have

4   these phones off.

5   But the only other thing -- so just to get back to

6   the point. So if you've been fully vaccinated -- if she tests

7   positive -- that's a big question. All right? If she tests

8   positive and you have been fully vaccinated or have had the

9   virus within 90 days, then you don't need to quarantine. You

10 just need to monitor your health. And you would need, however,

11 to be tested by Sunday.

12   So that's why, as soon as I learn -- I might learn

13 as soon as today. And if not today, I'm hopeful I'll learn by

14 tomorrow. And as soon as I learn, if it's positive, as I said,

15 I will notify you immediately.

16   So if, in fact, you have any symptoms, though,

17 please do let the Court know. If, on the other hand, you're

18 not fully vaccinated or you haven't had the virus and she turns

19 out to be positive, then you will have to quarantine for

20 14 days.

21   So as you know, in the environment that we're in, we

22 take precautions. I don't mean to minimize what Juror No. 7

23 has indicated. I have no way of knowing. People get colds and

24 things like that. And in this environment, we take

25 appropriately extra precautions.

1   So I don't want to alarm anyone. I just want to

2   make sure that you understand that we are taking appropriate

3   precautions, trying to be careful, trying to make sure that

4   we're mindful of everybody's health, and trying to be as

5   protective as we can.

6   If you do have any questions, you can let my

7   courtroom deputy know. I can have one of our experts, these --

8   this situation happens -- as you might imagine, it's not that

9   uncommon, given the threshold. It's -- we get notified very

10   frequently that there's an incident in the courthouse and these

11   are the actions and the protocols that have been taken.

12   The only other thing that I -- so if you have

13   questions, though, and you want to speak with someone, just let

14   us know. I'm happy to provide you with access to someone who

15   can give you more information, could answer any questions, any

16   concerns that you may have.

17   Also, part of the protocol -- and we adopted it --

18   is that we did have GSA, who's the agency involved in doing

19   cleaning and the like of the buildings, did some deep type of

20   cleaning, extra cleaning to both the jury deliberation room as

21   well as to the seats. So all of that -- that was done after

22   you left yesterday, and it has to cure overnight and the like.

23   And it's perfectly fine now. So that all has been done and is

24   perfectly -- perfectly cured.

25   So with that, we will proceed now with the trial.

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 1   We remain in the plaintiff's case, and I believe we're at the

 2   last witness of the plaintiff.

 3   So you may call your next witness.

 4   MR. RICHARD: Thank you, Your Honor. And I

 5   apologize for forgetting my wristwatch this morning.

 6   Plaintiff will call Dr. Najm.

 7   THE COURTROOM DEPUTY: Good morning, Doctor. Would

 8   you please come forward. Doctor, would you please walk around

 9   and get on the witness platform.

10   Sir, would you please raise your right hand.

11   Do you solemnly swear that the testimony you shall

12   give in the cause now before this Court shall be the truth, the

13   whole truth, and nothing but the truth, so help you God?

14   THE WITNESS: I do.

15   THE COURTROOM DEPUTY: Thank you, sir. Please be

16   seated.

17   Sir, for the record, would you please state your

18   name and then spell your last name, please.

19   THE WITNESS: May I remove --

20   THE COURTROOM DEPUTY: Yes.

21   THE WITNESS: Thank you.

22   My name is Issam Najm. That's I-s-s-a-m, last name

23   N-a-j-m.

24   THE COURT: You may proceed.

25   MR. RICHARD: Thank you, Your Honor.

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1   **<u>ISSAM NAJM, PH.D.</u>,**

2   **<u>PLAINTIFF'S WITNESS, WAS SWORN AND TESTIFIED AS FOLLOWS:</u>**

3   **<u>DIRECT EXAMINATION</u>**

4   BY MR. RICHARD:

5   Q.   Dr. Najm, have you been asked to provide expert

6   conclusions in this case?

7   A.   Yes, I have.

8   Q.   And can you tell us what questions you were asked to

9   consider?

10   A.   I was asked to consider two questions. First, as to

11   whether activated carbon or GAC treatment is an appropriate and

12   effective treatment for removing VOCs from water. And the

13   second question as to the cost of the treatment systems and

14   their operation at three locations.

15   Q.   And have you, in fact, reached conclusions on those

16   two questions?

17   A.   Yes, I have.

18   Q.   And before we get into your work and conclusions in

19   that regard, can you tell us, first, what is your job?

20   A.   I'm an environmental engineer. I work providing

21   water quality and water treatment, technical services to water

22   agencies and municipalities and other firms.

23   Q.   And where do you currently work?

24   A.   I work for a firm called Water Quality and Treatment

25   Solutions, which is a firm that I started 20 years ago.

1   Q.   And does the name of that company -- tell us again.

2 Water Quality and Treatment Solutions, Inc.?

3   A.   That is correct.

4   Q.   And that's a company you started?

5   A.   Yes, it is.

6   Q.   And does the name of the company in some way

7 describe the work that -- that it does?

8   A.   Water quality and water treatment services is all

9 that the company does, yes.

10   Q.   And can you tell us where you worked before starting

11 Water Quality and Treatment Solutions?

12   A.   Yes. I worked at an environmental engineering firm

13 in Pasadena. I started there in 1990. It was called

14 James M. Montgomery Engineers, which has since been merged with

15 others and recently acquired by Stantec Engineering. I worked

16 there from 1990 to 2000.

17   Q.   And can you tell us briefly what you did there?

18   A.   I did very much the same type of work, water quality

19 and treatment, technical support services for the firm and for

20 its clients.

21   Q.   And can you briefly describe for us your educational

22 background?

23   A.   Yes. I -- I earned a bachelor's degree in civil

24 engineering from the American University of Beirut in Lebanon.

25 I then came to the University of Illinois at Urbana-Champaign,

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1   and I got my master's degree there in environmental engineering

2   in 1987. And then I received my Ph.D. in environmental

3   engineering from the University of Illinois as well in 1990.

4   Q.   And to obtain your Ph.D. in environmental

5   engineering, were you required to prepare or present a thesis?

6   A.   Yes. I did research work and a Ph.D. thesis as part

7   of that degree.

8   Q.   And can you tell us what the subject matter of that

9   Ph.D. thesis was that -- for the Ph.D. you obtained 30 years

10   ago?

11   A.   Yes. I -- the thesis topic was about the use of

12   activated carbon for removing organics from water.

13   Q.   Okay. And that's the topic that you'll be

14   testifying on today?

15   A.   Yes. It's under that topic.

16   Q.   I didn't mean we were going to make you present your

17   thesis. Sorry.

18   A.   Thank you.

19   Q.   So have you become familiar with the use of

20   activated carbon for removing contaminants over the last

21   30 years?

22   A.   Yes, I have.

23   Q.   And that's -- is that a regular part of your

24   professional life?

25   A.   Yes. It's one of the technologies that we help our

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1 clients work through.

2   Q.   And can you describe for us any professional

3 licenses you hold, sir?

4   A.   Yes. I am a certified professional civil engineer

5 in the state of California, and I am a board-certified

6 environmental engineer from the American Academy of

7 Environmental Science Engineers and Scientists.

8   Q.   Okay. Do you have any teaching experience?

9   A.   Yes. I -- I taught throughout my graduate school,

10 but I'm also right now an adjunct associate professor at UCLA

11 in the environmental -- civil environmental engineering

12 department.

13   Q.   And have you taught any courses that involve the

14 water treatment systems?

15   A.   Yes. My teaching at UCLA is about water treatment

16 processes and engineering.

17   Q.   And would that include the design of water treatment

18 systems?

19   A.   Yes, it does.

20   Q.   And do you have any experience with conceptual

21 design of water treatment systems for contaminant removal?

22   A.   Yes, I do.

23   Q.   And can you describe that briefly for us, what --

24 what that experience entails in terms of design of water

25 treatment systems for contaminant removal?

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1   A.   Yes. Before a project gets the detailed engineering

2   work and construction, they need someone to evaluate the

3   treatment options and lay out how big the system needs to be

4   and what its engineering parameters need to be, and that's what

5   we do before the project gets handed over to a detail design.

6   So that's the conceptual engineering part of the overall

7   process.

8   Q.   And then when a treatment system is completed for

9   the removal of contaminants from water, are you involved in

10   evaluating the performance of those water treatment plants?

11   A.   Sometimes I am, yes. The -- the agencies would ask

12   us to take a look at how the system is performing and see if

13   there's any means for improvement.

14   Q.   And is it part of your professional activities to

15   review water treatment design plans from time to time?

16   A.   Yes, it is.

17   Q.   And can you briefly explain why that comes up in the

18   work you do, the review of water treatment plans?

19   A.   Yes. Because, uh, we have spent our careers on the

20   technical aspects of the treatment systems. So when a design

21   firm takes on the job of designing the details of the valves

22   and the pumps and all that, the water agencies sometimes want

23   the people who did the technical basis work to be overseeing

24   what the detailed engineering is doing and make sure that it's

25   going to give them the system that was envisioned initially.

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1   And so we get retained by the water agency to serve

2   as reviewers of that design, to comment on it and see if

3   there's anything that needs to be corrected.

4   Q.   And in your work designing, overseeing, and

5   following up after water treatment plants have been

6   constructed, have you become familiar with something called

7   "cost estimation"?

8   A.   Yes. Cost estimation is very much part of the

9   conceptual engineering step that we do.

10   Q.   Can you explain that, please?

11   A.   Yes. Um, again, when -- when a water agency is

12   looking to put in treatment at the beginning, they need to

13   understand what is required. And so they -- we do the

14   conceptual engineering of that.

15   And as part of their thinking about do they want to

16   proceed, do they want to do something else, they want to

17   understand what is the cost of this, how much is it going to

18   cost them if they do go down that road.

19   And so we do cost estimating as part of that

20   conceptual engineering package.

21   Q.   And can you give us any examples of water treatment

22   systems you've worked on in your professional experience

23   involving cost estimation? Let's start there.

24   A.   Yes. I have worked on many over my career. Um,

25   most recently a project for the Santa Clarita Valley Water

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1 Agency that put in a treatment system, including the same type

2 of vessels at the end well treatment system. We did a cost

3 estimate for them at the beginning of that effort, um, which

4 is -- the plant now is operating.

5   We did a project for Park Water Company in Compton.

6 They had a groundwater treatment system that was required to

7 remove arsenic from groundwater using very much the same type

8 vessels, and we did a -- the conceptual engineering and the

9 cost estimating for them. This was about ten years ago.

10   Um --

11   Q.   And just let me stop you there. When you say

12 "vessels," can you explain for us --

13   A.   Sure.

14   Q.   -- what we're talking about?

15   A.   Yes. A vessel is basically a large filter. So if

16 you want to run the water through a filter, you know -- at home

17 we're used to a filter on the refrigerator that may be this

18 small. For large systems, the filter is just enlarged. So

19 it's a large steel vessel, could be 12-foot diameter and

20 20 feet high and has the filter material inside it, and so

21 water is passed through that filter.

22   So when we say "vessel," we're really talking about

23 filters.

24   Q.   Okay. And typically for water treatment systems, in

25 your experience, about how large are those vessels or filters?

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1   A.   A standard filter, a typical filter is, as I

2 mentioned, a 12-foot diameter vessel and can be 10 to 20 feet

3 tall, depending on how big the filter needs to be.

4   Q.   Okay. I interrupted you. You described a recent

5 project involving six vessels at something called the end well.

6 You mentioned a project in Compton about ten years ago. Any

7 other experience with cost estimation in these treatment

8 systems?

9   A.   Yes. We -- I worked on a project that was looking

10 actually at the national costing for treatment of hexavalent

11 chromium, which is a metal in -- dissolved in water using the

12 similar filtration-type vessels. And we did the conceptual

13 cost estimating for different size systems that goes into that

14 report.

15   Q.   Okay. That's probably enough, but any others come

16 to mind?

17   A.   I'm sure something will, but not at this moment, if

18 that's okay.

19   Q.   Okay. And can the -- you were talking to us about

20 these vessels and these treatment plants. Are these treatment

21 plants that remove contaminants from the groundwater, are they

22 used just for water agencies, or do they have other

23 applications, in your experience?

24   A.   No. These are used for any application that is

25 looking to remove these chemicals from the water that they pull

1   out of the ground. So what the end purpose of it is not

2   relevant to the use of these filters.

3   Q.   Okay. So the plants are not limited to drinking

4   water?

5   A.   They are not.

6   Q.   Can you give us an example, um, of when one of these

7   treatment plants with these large vessels would be used for

8   water that's not part of a -- a water agency?

9   A.   Um, typical groundwater, quote/unquote, "cleanup

10   programs" utilize these filters to pump the water out with the

11   wells and then treat them through these systems if they are

12   looking to clean up the groundwater.

13   Q.   Okay. And in your line of work, are you familiar

14   with the term "remediation"?

15   A.   Yes, I am.

16   Q.   And can you briefly tell us what that means?

17   A.   Yes. Remediation is what I just described, which is

18   cleaning up a contaminated groundwater and taking that water

19   out and cleaning it through treatment systems, whether GEC or

20   others, to remove the contaminants from them.

21   Q.   And in your experience, with respect to cost

22   estimation, is there a general approach or methodology that's

23   used by professionals in that area?

24   A.   Yes. There is fairly comprehensive methodologies

25   that are available to professionals like me and others to use.

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1   Q.   And have you heard of something called the

2   equipment-factored approach?

3   A.   Yes. The equipment-factored approach is one of the

4   methodologies used in cost estimating.

5   Q.   And what does that approach entail?

6   A.   At the conceptual engineering level, there is still

7   no design done, there is no details of the system. And so we

8   are tasked with projecting what that cost could be.

9   And so what we do is we determine the components of

10   the system, so how many filters it's going to have. Is it

11   going to have a building? Is it going to have a big tank for

12   some purpose? Is it going to have a certain chemical feed that

13   is needed for the system?

14   So we get -- project the costs of these components,

15   and those are the basic components. And then from there, we

16   put percentages on top of them for the construction work. So

17   whether dirt needs to be moved to a level of the floor, whether

18   to put -- make new electrical connections, make new mechanical

19   controls, as well as engineering design.

20   So we add percentages on that. So it's factors on

21   top of the equipment, and that's why it's called the way it's

22   called.

23   So it's a way to project the total project cost

24   without yet having a design for it.

25   Q.   And are you familiar with any guidelines that

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 1   describe that equipment or refer to that equipment-factored

 2   approach that you just described for us?

 3        A.    Yes.  There is -- there is Association for the

 4   Advancement of Cost Engineering, AACE.  It is a professional

 5   association that puts out these guidelines.  And that is one of

 6   the methods that they list in there for cost estimating.

 7        Q.    And are you familiar with other professionals in the

 8   environmental engineering field, given your 30-years-plus

 9   experience?

10        A.    Yes, I am.

11        Q.    And are the principles that you've described

12   regarding cost estimation based on the equipment-factored

13   approach, are those widely used?

14        A.    They are very widely used.

15        Q.    And how do you know that?

16        A.    I work with other firms every day.  We collaborate

17   on projects.  I see what they do.  They see what we do.

18        Q.    And are the principles from this group you

19   mentioned, the AACE folks, are those put forth in writing?

20        A.    Oh, yes.  Principles as in the guidelines, I

21   appreciate that.  Um, yes, they are.

22        Q.    I'd like to show you what the parties have

23   stipulated to, Exhibit 1334.

24              (Exhibit 1334 received into evidence.)

25        Q.    (BY MR. RICHARD:)  And are you familiar with this
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1 document entitled "Cost Estimate Classification System as

2 Applied in Engineering, Procurement, and Construction for the

3 Environmental Remediation Industries"?

4   A.   Yes, I am.

5   Q.   And who puts out this particular publication?

6   A.   It's AACE International.

7   Q.   Okay. And if you could turn to -- maybe it's

8 page 8. And are you familiar with the -- can you tell us what

9 page 8 of Exhibit 1334, this chart of primary characteristics,

10 secondary characteristics, what does this chart --

11   A.   Yes.

12   Q.   -- tell us?

13   A.   This is a good summary table of all the level of

14 cost estimating that is done on a project from its conception

15 all the way to its design. And this lays out a summary of

16 that -- those guidelines for cost estimating.

17   Q.   And are these -- what do these various classes

18 reflect? You see Class 5 down to Class 1. Just very briefly,

19 tell us what those reflect.

20   A.   Yes.

21   Class 5, if you look at the column next to it, it

22 says 0 percent to 2 percent, project definition. That means

23 how much detail do you have about how the project is going to

24 be laid out, what the details of it are. So this is at the

25 very initial conceptual level.

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1   And then as you go up -- or you go down in the table

2   in class number, you see the percentage next to it increase.

3   That means, as more details about the design of the system are

4   laid out, then there's a higher and higher definition of the

5   details of that plan.

6   Q.   And is this a document and guidelines that you

7   worked with in this case?

8   A.   Yes, it is.

9   Q.   And you've worked with these in other engagements

10 that you've been involved in?

11   A.   Yes. I worked with these guidelines before.

12   Q.   For the construction of actual treatment systems?

13   A.   Yes.

14   Q.   And can you tell us, um, in addition to looking at

15 these guidelines -- or this classification system in

16 Exhibit 1334, what else you did, what other work you did to

17 answer the questions you set out for us a few minutes ago?

18   A.   Yes.

19   So as I noted in my report, I had a -- first I

20 relied on documents that had been produced in the past to

21 understand the -- the subject matter that we're dealing with

22 since I was not engaged in it before. And so I looked at the

23 materials provided to understand what VOCs we are talking about

24 to be able to answer the first question, and so I looked at

25 those.

1   I looked at the levels of VOCs that were measured,

2   and I evaluated the treatment system options to answer the

3   first question. And then I also obtained information on how

4   big each plant needs to be because that's a main factor for

5   selecting how many filters need to be installed. And that

6   basically fed into the second question of cost estimating.

7   Q.   And can you explain that again? When you say you

8   looked at the -- you say the size of the filters?

9   A.   Yes. Because every -- for certain contaminants

10   using a certain treatment system, there needs to be a

11   sufficient size of the filter for the water to pass through for

12   the contaminant to be removed.

13   And so if the well produces ten times what a single

14   filter can handle, then you need ten filters for it. And

15   that's how it's used to select how many -- how many filters

16   need to be in the system.

17   Q.   So in this case, did you look at the -- what's the

18   term for determining how much water a particular well produces?

19   A.   The well production is what I use for determining

20   the amount of water in gallons per minute that needs to be

21   produced by this treatment system.

22   Q.   And can you give us either a range or a -- an

23   example of what the gallons per minute is for the wells you

24   looked at in this case?

25   A.   Yes. For the Saugus wells, there are two wells.

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1   Each one is about 1,000 gallons per minute. So that treatment

2   system is about 2,000 total gallons per minute.

3   Another one, 201, is about also 2,200 gallons a

4   minute. And then the third one is 205. I believe it is

5   2,700 gallons per minute.

6   Q.   Okay. And so after you looked at the documents, the

7   background information, data on the levels of the contaminants,

8   sized the system, what other work did you do in this case?

9   A.   I -- I evaluated treatment alternatives for VOC

10   treatment, and I looked at three different treatment

11   technologies. And for the cost estimating, I applied the

12   methodology that we just discussed to the number of filters and

13   now that I have the equipment numbers and developed the cost

14   estimate.

15   Q.   Okay. So you developed the cost estimate for the

16   treatment of the wells you just listed for us?

17   A.   Yes, I did.

18   Q.   And you referred to data regarding the level of

19   contaminants in the wells. What -- in general, what data did

20   you review?

21   A.   I looked at data about the levels of TCE, which is

22   tetrachloroethylene, and PCE, which is perchloroethylene -- I'm

23   sorry. TCE is trichloroethylene, and PCE is

24   tetrachloroethylene.

25   Q.   I'm going to show you one of the tables from your

1 expert report. And that table has been marked as a standalone

2 exhibit that is stipulated to, and that is Exhibit 522.

3   (Exhibit 522 received into evidence.)

4   Q.   (BY MR. RICHARD:) And is this a table that you

5 prepared?

6   A.   Yes. This is a table that I prepared that is in my

7 report.

8   Q.   Okay. And can you tell us what Exhibit 522 is?

9   A.   These are the levels of TCE and PCE in the Saugus 1

10 well since January 2016 through the last data that I received.

11   Q.   And I see along -- and I always forget if it's the

12 axis, but I see along the horizontal line there a reference to

13 MRL .5 ppb. Do you see that?

14   A.   Yes, I do.

15   Q.   And can you tell us what that refers to, sir?

16   A.   Yes. MRL is the -- refers to the minimum reporting

17 level, and this is a number that analytical laboratories --

18 certified analytical laboratories use as a cutoff. Above that,

19 they can report a result with confidence. Below that, it does

20 not mean that it's not there, but it means that there is less

21 confidence in that value.

22   So it's used as a confidence level by laboratories

23 to delineate levels that are reported to the owners.

24   Q.   Okay. And even though you have this data here on a

25 chart -- and this is for the Saugus 1 well; is that right?

1   A.   That is correct.

2   Q.   And so you looked at recent data that confirms for

3 you the presence of TCE and PCE. You're not -- are you --

4 you're not here to offer an opinion on where those chemicals

5 came from, are you?

6   A.   No, I am not.

7   Q.   Okay. And did you look at the same type of data

8 that we see in this Figure 2, Exhibit 522, did you look at data

9 regarding TCE and PCE for the -- for the other wells that --

10 for which you were preparing a cost estimate in this case?

11   A.   Yes, I did for the Saugus 2, for 201 and 205, which

12 are in my report.

13   Q.   Okay. And before we walk through your -- your

14 conclusions regarding what it would cost to put in those

15 treatment plants, I want to ask you about the first question

16 that you mentioned as to whether this -- do you call it GAC

17 treatment?

18   A.   GAC, or GAC is fine.

19   Q.   And that stands for what?

20   A.   Granular activated carbon.

21   Q.   And how does that remove these contaminants from the

22 drinking water, just briefly?

23   A.   Sure.

24   This is basically crushed coal. And it is crushed

25 coal and then it is activated through heat activation to make a

1 surface in such a chemical way that organic chemicals attach to

2 it. So as the water is passing through a filter of this

3 crushed material, the organic chemicals migrate out from the

4 water onto this material and they stick to the surface of it.

5   Q.   Okay. And that technology, that's been around for a

6 few years?

7   A.   That technology has been around for decades.

8   Q.   All right. And is that the same type of technology

9 that you touched on in your thesis over 30 years ago?

10   A.   Yes, it is. It is the same technology that is used

11 in Brita filters. It is the same technology that is used in

12 refrigerator filters. It's all about using these absorbents to

13 remove material.

14   Q.   And so with respect to that first question as to

15 whether this carbon -- this GAC treatment is an appropriate

16 treatment system in this case, did you reach a -- a conclusion?

17   A.   Yes, I did.

18   Q.   And can you describe for us what your conclusion is

19 in that regard?

20   A.   Yes. I concluded that granular activated carbon is

21 very much an appropriate and effective technology for removing

22 TCE and PCE from water.

23   Q.   Can it remove, um -- so it removes both TCE and PCE?

24   A.   That is correct.

25   Q.   And what is your conclusion that GAC treatment is an

1   appropriate and reliable method, what is that based on?

2   A.   Well, it is, first, based on my 30 years of working

3   in this field. And I've experienced and collected data on the

4   performance of activated carbon for many systems. And so it is

5   very much a standard in our profession.

6   But moreover, the U.S. EPA identifies different

7   technologies as -- what they refer to as best available

8   technologies for a certain contaminant. And activated carbon

9   is defined by the U.S. EPA as a best available technology for

10   VOC removal, and VOC includes TCE and PCE.

11   Q.   And as to the second question regarding the expected

12   costs of the treatment facilities in this case, did you --

13   let's start with Well V-205. Did you reach a conclusion in

14   that regard?

15   A.   Yes, I did.

16   Q.   And can you tell us what your conclusion is as to

17   the -- the cost of a treatment system at V-205?

18   A.   Um --

19   Q.   Tell us in general, and then I'll find a --

20   A.   Yes. I -- I developed that cost estimate based on

21   my professional experience and based on the methodology that I

22   described. And I'm trying to recall, but I recall the -- the

23   cost for getting it up and running was about 17 million.

24   Q.   Okay. Why don't we --

25   A.   But I hope I'm correct.

1   Q.   Well, it's not -- it's not entirely a memory test

2   here today.

3   Did you prepare materials setting forth your

4   conclusions as to your cost estimate for each of these

5   treatment plants in your report?

6   A.   Yes. I laid out the steps of the methodology and

7   the basis of it and all the factors that I used in the

8   analysis, and they're all in my report.

9   Q.   Okay. And then you provided a summary as well?

10   A.   Yes. And I provided a summary.

11   Q.   Why don't we go to the summary, which is a

12 standalone exhibit that's been stipulated to. It's one page,

13 Exhibit 523. It's called "Table 2. Summary of Probable Costs

14 of the Three Treatment Systems."

15   (Exhibit 523 received into evidence.)

16   Q.   (BY MR. RICHARD:) And is this a document you

17 prepared, sir?

18   A.   Yes. This is a table that I prepared in my report.

19   Q.   And does Exhibit 523 reflect your overall

20 conclusions regarding your cost estimation in this case?

21   A.   Yes, it does reflect my -- my conclusions at the

22 time I prepared this report.

23   Q.   Okay. And that was about -- what? -- sometime

24 midyear you prepared your report?

25   A.   I think so. Maybe July or August.

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 1        Q.    And so let's look at the first line there.  You have

 2   capital cost.  What does that refer to, capital cost?

 3        A.    Capital cost is a term that we use to describe the

 4   entire cost of going from an open lot, nothing on it, all the

 5   way to a plan that is producing drinking water.

 6        Q.    And what is the probable cost estimate you developed

 7   for the Saugus 1 and 2 treatment plant to remove the TCE and

 8   PCE from the drinking water?

 9        A.    I prepared a probable cost estimate that came out to

10   7.6 million.

11        Q.    And for V-201 -- and by the way, the Saugus, you

12   have 2,200 gpm.  What does that refer to?

13        A.    That is 2,200 gallons per minute.  That is the

14   production out of that treatment plant.

15        Q.    Okay.  And then for V-201, do you have a probable

16   cost value?

17        A.    Yes.  For the 2,000 gallons per minute, it's

18   5.5 million.

19        Q.    And for V-205 at 2,700 gallons per minute, do you

20   have a probable cost value?

21        A.    Yes.  It is 17.3 million.

22        Q.    And for V-205, what -- why is that higher than the

23   other numbers you have there for what it would take to put in

24   treatment for the Saugus wells and V-201?

25        A.    There are many factors for that.  The most
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1 significant factor is that the Saugus 1 and 2 and V-201 are

2 just for VOC. The V-205 is for VOCs as well as perchlorate

3 because right now V-205 has no treatment on it. So that's one

4 factor.

5   But the other factors are the other -- the other

6 systems already have components that can be used to monitor and

7 control the new vessels that would need to be added. But 205

8 has nothing. So everything has to be built to accommodate it.

9 So that increases the cost.

10   And it's important to understand that the capital

11 cost is not just the construction cost. It's the engineering

12 cost. It's the permitting cost. It's all the sewer lines that

13 may need to be connected to that location. So it's beyond just

14 construction.

15   Q.   Thank you.

16   And so if we total the two VOC treatment systems and

17 then the VOC treatment system and perchlorate treatment system

18 for V-205, what is your cost estimate for all of the treatment

19 systems?

20   A.   The probable cost value is added up to 30.4 million

21 for the capital cost.

22   Q.   And I want to ask you to the -- the next column

23 over, you have a likely cost range. Do you see that?

24   A.   Yes, I do.

25   Q.   And my first question is: Where does that range

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1   come from?

2   A.   Those -- that range comes from the guideline that we

3   discussed earlier from AACE that defines the range of probable

4   cost certainty at different levels of project definition.

5   Q.   Okay. And which level of project definition, again,

6   did you use?

7   A.   My work was referred -- it was Class 4, which is

8   between 1 and -- I believe 1 and 15 percent definition of the

9   project.

10   Q.   And so why do you have a range?

11   A.   Well, because -- this is like somebody asking you,

12   you know, I want to build a house on that lot. How much is it

13   going to cost me? Well, there's no details yet as to what

14   the -- what that is going to require. We don't know what kind

15   of conditions the foundations need to be.

16   So there's a lot of uncertainty at that level in

17   cost estimate about what the final number that, after you

18   finish all the detail design, would be.

19   So the guideline from the AACE defines a range of

20   what that cost ultimately might be based on the class. So as

21   you are in a Class 4 or 5, it's a wider range because there's

22   very little defined about the project yet. But as you define

23   more and more details, the detail design is done, the soil

24   condition is determined to know whether the foundations are

25   going to be sufficient, that range decreases.

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 1              But at the Level 4, it could be between minus

 2   30 percent of that probable cost to plus 50 percent.  And it

 3   doesn't mean it cannot be higher.  It could be.  But that is

 4   the range for the guidelines in that professional organization,

 5   and that's what I used in this.

 6        Q.    Okay.  And that's a -- is that a standard component

 7   of cost estimation?

 8        A.    That is a standard component of cost estimation.

 9        Q.    And then the next category you have is something

10   called annual O&M cost.  Can you briefly explain for us what

11   that is?

12        A.    Yes.  So, you know, we put the treatment system in

13   place.  And you start it up just like any other -- again, I'll

14   use the refrigerator filter.  Every now and then you have to

15   replace the filter material because it gets loaded with the

16   organic chemicals.

17              And so there is a cost that is incurred every year

18   for replacing the material with new material.  That, also,

19   there's cost to -- for power.  There is cost for chemicals.

20   There is cost for the different components like analytical

21   work.  You have to take samples, report them to the State on a

22   weekly or biweekly basis.  All of these is part of the annual

23   cost of operating the system.

24        Q.    And are you familiar with O&M costs from other

25   projects you've worked on?
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1   A.   Yes, I am.

2   Q.   Is that a standard feature of water treatment

3   projects?

4   A.   It is very much a standard feature, yes.

5   Q.   And how did you pick 30 years for your operating

6   period?

7   A.   That is a very difficult number to project. Um,

8   most of the time we pick this number based on what we believe

9   to be the expected life of the system. So for the expected

10   life of this filtration system, you know, how long it's going

11   to take to operate it, if you still have the contamination

12   after that, you have to either upgrade the system again or put

13   a new system for the next 30 years. But for the purpose of

14   projecting based on the expected life of the system, that is

15   the number that we work with.

16   Q.   And do the vessels have some expected life -- these

17   big metal filters you talked about, do they need to be

18   refurbished or replaced over time?

19   A.   Very much so. Every mechanical piece, every vessel,

20   every pipe, you know, eventually will start to corrode, will

21   have problems that need to be refurbished, yes.

22   Q.   And so you have these costs over 30 years, and then

23   you apply something called the discount rate and annual cost

24   escalation. And what does that tell you once you've applied

25   those factors?

1   A.   So the idea behind projecting what we refer to as

2   the net present value of that cost is that, if you think about

3   it, if you have to have a pot of money now to run the system

4   over the next 30 years, you have to take a certain amount of

5   that pot to spend on that operation.

6   So what size is that pot of money that you need to

7   have to fund the next 30 years of operation? And there are

8   financial factors that are used in that.

9   So the two financial factors are cost escalation,

10   the products over -- you know, 20 years from now, a cubic foot

11   of this material is going to cost more than it does now. And

12   so we used -- I believe a 1.5 percent annual escalation rate

13   for that product material as well as the other operating costs.

14   And then we also apply what we refer to as the

15   discount rate in the sense that, if you have money in the bank

16   now and, you know, there's interest on that money that you

17   gain, so you account for that gain in the financial

18   calculation.

19   But ultimately, it's a financial equation that is

20   used in engineering applications of cost estimates to develop

21   what we call what is the size of that pot today.

22   Q.   And so that's called net present value or net

23   present worth?

24   A.   That is the net present value for the annual O&M

25   costs, yes.

1   Q.   And so you have total net present worth of

2    $64.6 million. Does that reflect both the capital costs you

3   described and then these O&M costs over time?

4   A.   Yes. So the capital cost is listed above total

5   capital cost of 30.4 million. And then the net present worth

6   of the annual O&M cost, the line before last, that's

7   34.2 million. So the 34.2 is that pot we need to fund the

8   operation over the next 30 years.

9   So the sum of the two is the total pot you need to

10   build the system and operate it over the next 30 years, and

11   that's the total net present worth value.

12   Q.   And even though there's the -- a standard range, do

13   you believe that the number you've identified is a reasonable

14   cost estimate for those items?

15   A.   Um, at the time I prepared this report, it is a -- a

16   reasonable cost estimate, but there is a lot going on in the

17   market that is of concern to me about how fast the cost of

18   things are going.

19   Q.   Okay. And you mentioned that there are cost

20   estimating parameters and various things you looked at. I

21   don't want to spend too much time on this. But can you -- did

22   you prepare a chart regarding the various parameters and

23   factors you looked at to develop each of these numbers?

24   A.   Yes. There is a table in my report that identifies

25   the exact percentage factors that I applied to the equipment.

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1   THE COURT: And, Dr. Najm, when you say that you

2   have concerns about what's going on in the market, are you

3   referring to inflation or something else?

4   THE WITNESS: Inflation and cost increase of items,

5   yes.

6   THE COURT: All right. Please continue.

7   MR. RICHARD: Thank you, Your Honor.

8   Q.   (BY MR. RICHARD:) If you could take a look at

9   Exhibit 524, which is a one-page standalone document that the

10 parties have stipulated to. It's called "Table 3, Cost

11 Estimating Parameters."

12   (Exhibit 524 received into evidence.)

13   Q.   (BY MR. RICHARD:) And if you could very briefly

14 tell us whether this has anything to do with that

15 equipment-factored approach you talked about a few minutes ago.

16   A.   Yes. This is the details of how I developed the

17 cost estimate total, and this is a table that I prepared, as I

18 mentioned, that's in my report. And so you see the equipment

19 and building up on top that have, you know, the checkmarks for

20 each line item under each well. It basically means that that

21 was needed in this plant.

22   And so in the far right column, I sort of

23 identify -- give a letter to each row of items. So the total

24 is G, and that will be the total of the equipment and building

25 and valves and slab. And then from there, we go to the next

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1   block, which is the construction effort.

2   So we identify a number of items that the

3   construction contractor would need to do and -- like

4   mobilization, site work. That just means, you know, grading,

5   leveling things out, yard piping, building pipes underground,

6   electrical, instrumentation, and all that stuff. And there's a

7   certain percentage of the G value that is identified.

8   So for mobilization, it's 5 percent of G. For site

9   work and yard piping, 20 percent for the first two, 30 percent

10   for the other and so on.

11   Q.   Okay. And same thing for the third category,

12   professional services. Those percentages are based on their

13   function of what?

14   A.   Yes. So if you -- there's a construction total

15   which identifies -- is the G plus N plus O plus P. That is all

16   the equipment and the construction cost. The total is Q on the

17   right. And so the professional services are percentages of

18   that Q value.

19   Q.   Okay. And you identified values for each of these

20   items in your work in this case?

21   A.   Yes. These are the values that I applied to this

22   cost estimate.

23   Q.   And then did you select dollar values for each of

24   these components for the projects at issue in this case?

25   A.   Under the equipment and building, yes. Dollar

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 1    values for each that added up to the G value in this table.
 2         Q.    And is this an approach that you've used in other
 3    successful projects?
 4         A.    Yes.  This is my standard approach based on
 5    professional work.
 6         Q.    And so how do you know what cartridge filters cost?
 7         A.    I work with conceptual engineering work a lot.  We
 8    see a lot of bids from vendors.  We ask vendors for bids on
 9    different things.  And this is what this is based on.  It's
10    based on my knowledge of what these items have cost in the past
11    as I was approaching the cost development.
12         Q.    Okay.  And so if -- and you -- did you prepare a
13    separate summary taking the formula reflected in Exhibit -- or
14    the approach reflected in Exhibit 524, did you then plug in the
15    dollar figures for those various equipment, slab, and building
16    costs?
17         A.    Yes.  I prepared a table that takes these
18    percentages and these values and detailed them in the report as
19    a detailed table of what the dollar numbers end up to be.  That
20    amount is the capital cost summary that we talked about
21    earlier.
22         Q.    Okay.  Why don't we look at a single-page document
23    the parties have stipulated.  It's from your report.  It's
24    Exhibit 525.  It is entitled "Table 4, Detailed Breakdown of
25    the Capital Cost Estimate for the Three Plants."
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1   (Exhibit 525 received into evidence.)

2   Q.   (BY MR. RICHARD:)   Did you prepare Exhibit 525, this

3   Table 4, sir?

4   A.   Yes.   This is a table that I prepared that is in my

5   report.

6   Q.   And you -- you talk about vessels is the first item.

7   Is that -- is that -- is that the single largest cost item in

8   general for the equipment, slab, and building?

9   A.   Yes.   These are generally the -- the largest item in

10   this type of treatment system.

11   Q.   And so did you use a price per vessel in your

12   approach here?

13   A.   Yes.   At the time I prepared this report, I had seen

14   cost estimates of vendors.   It's basically about 200,000 per

15   vessel.

16   Q.   Okay.   So I can go out and buy one of these vessels

17   today for $200,000?

18   A.   I don't think so.

19   Q.   Why do you say that?

20   MR. GALLAGHER: Beyond the scope.

21   THE COURT: Overruled.

22   THE WITNESS: Um, most recently there has been a

23   very strong rise in demand for these vessels for various water

24   treatment reasons.   These vessels right now are probably 50 to

25   100 percent more expensive than they were just a year ago, and

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1 you have to wait almost a year to get it delivered.

2   Q.   (BY MR. RICHARD:)   Okay.   But just sticking with the

3 numbers you put in in your report from July, you went through

4 and identified a cost for each of the items in equipment, slab,

5 and building?

6   A.   Yes, I did.

7   Q.   And that was based on your familiarity with those

8 items, based on your current and recent work?

9   A.   Yes, it is.

10   Q.   And so once you developed those -- a summary of

11 those expenses for equipment, slab, and building, are those,

12 then, the numbers you used under the methodology you described,

13 this -- start with the equipment, you factor that, and then you

14 come up with a total.   That's the approach reflected in

15 Exhibit 525?

16   A.   That is, yes, a reflection of those factors that we

17 discussed earlier on top of the total equipment and slab and

18 building numbers.

19   So, for example, when we said 5 percent of

20 mobilization, 5 percent of 2.5 million on the very first column

21 is 125,000 and so on.

22   Q.   Okay. And so -- but aren't these numbers just -- I

23 mean, aren't you just guessing, sir?

24   A.   I am not guessing. These are numbers that are based

25 on long professional experience of developing these numbers,

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1   seeing what the costs are, and observing the market.

2   Q.   And how did you determine -- you have a footnote

3   here, and you talk about six GAC vessels for one system -- for

4   Saugus 1 and 2, four for V-201, and then six for V-205. How

5   did you determine that six vessels would be needed for the

6   Saugus 1 and 2 VOC treatment system?

7   A.   So as I mentioned early on, there is so much flow

8   you can put through a single filter for it to work properly.

9   And so the size of that filter is related to that flow. So we

10 need a certain number of minutes of water flow through that

11 filter for the VOCs to be removed.

12   And so that basically locks in how many gallons per

13 minute you can process through an individual filter. And so

14 now, the total divided by that gives you how many vessels we

15 need.

16   So for the 2,200 gpm -- sorry, 2,000 gpm for

17 Saugus 1 and 2, for GAC treatment, we need six vessels to get

18 efficient performance.

19   Q.   But is there a formula -- can you be a little bit

20 more precise that folks in your line of work, as opposed to

21 perhaps a general civil engineer, is there a formula that comes

22 into play for those factors, and can you walk us through that?

23   A.   Yes. There is a parameter that is called EBCT,

24 which refers to the empty bed contact time. And what it is, it

25 is the volume of the filter material divided by the flow rate.

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1   So, for example, if you have a thousand cubic feet

2 of -- or let's say 100 cubic feet of the material in there --

3 better yet, let's say 100 gallons, then if we need 10 minutes

4 of time, then 10 divided by the flow rate needs to be

5 10 minutes and not more.

6   And so a -- if you have a volume of 100 gallons, you

7 can process a thousand gallons per minute, and that gives you

8 10 minutes of time through that filter. And that's what that

9 number is based on.

10   Q.   So just so -- and I'm not going to have you go

11 through it, you know, in a chart. But if this -- what was it

12 called? The EBCT time? That's the time that the water is in

13 contact with the carbon?

14   A.   Yes.

15   Q.   And if you -- is the 10 minutes that -- this is a

16 calculation you actually did in this case to come up with the

17 number of vessels?

18   A.   Yes. I did a calculation for that time in one

19 vessel. In fact, I used 7.5 minutes as the basis. And then I

20 used a -- a dual filter system where there's a first filter and

21 a second filter. And so that's how you end up with three

22 total -- with six total vessels.

23   Okay. So the flow rate gets divided between three

24 separate trains. Each vessel is sized for that 7.5 minutes.

25 And there is a -- a filter and a second filter after it as part

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1   of the overall configuration.

2   Q.   And is there a name for that when you have a

3   two-filter system?

4   A.   Yeah. It's called a lead-lag configuration system.

5   Q.   Is that different than something called in parallel,

6   where the water is going through the vessels separately at the

7   same time?

8   A.   Yes. Parallel is where just water goes through one

9   filter and then goes out, and that's it. It's treated. The

10   lead-lag, it goes through one filter, then goes through a

11   second filter that is of equal size.

12   Q.   And would the number of vessels -- could it vary

13   depending on whether you're using the system in parallel or the

14   lead-lag system that you described?

15   A.   Yes. It would require half the number of vessels.

16   Q.   Okay. And just so I'm clear on this EBCT time, is

17   the ten-minute number a reasonable number to use in this kind

18   of analysis?

19   A.   Yes. It is a -- a standard number for granular

20   activated carbon systems for VOCs.

21   Q.   And that lead-lag system?

22   A.   That lead-lag configuration is a -- is a setup that

23   the State in many applications requires for treatment systems,

24   and that's what my cost estimate is based on.

25   Q.   And conceptually, if the less time -- so if we say

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 1   it was five minutes, contact time between the water and the

 2   carbon, how does that impact the filtration process, if you

 3   will?

 4        A.    So there is less time -- basically, we're giving

 5   this organic molecule less time to move from the water onto the

 6   carbon, onto the surface of the carbon.  So the shorter you

 7   make it, the higher the chance of not having it be removed and

 8   simply goes in and goes out.

 9             And so at some point the system fails if the time is

10   too short because, if you turn it on and there's VOCs already

11   coming out of the filter, that's not much of a filter.

12        Q.    Okay.  And then I'm just -- one quick second here.

13             You just -- you used a couple of terms in your

14   report I just want to ask you about real quickly, sir.

15             You mentioned MCL.  Can you tell us what an MCL is?

16        A.    An MCL refers to a maximum contaminant limit.

17        Q.    Okay.  And you mentioned an MCLG.  What's that?

18        A.    In the regulatory development process, an MCLG is --

19   is the -- is an MCL goal.  And so it is a goal that the EPA

20   develops and identifies for different contaminants.  And the

21   idea is that the MCL needs to be as close as possible to the

22   MCLG.

23        Q.    Okay.  And what is the -- what MCLG did you identify

24   for your work in this case, for these contaminants?

25        A.    Well, both TCE and PCE are cancer-causing chemicals.
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UNITED STATES DISTRICT COURT

1   And by EPA --

2   MR. GALLAGHER: Beyond the scope, Your Honor.

3   THE COURT: Sustained.

4   MR. RICHARD: I'm sorry. This is directly in the

5   report, Your Honor. Can I ask another question, please?

6   THE COURT: The Court's going to sustain it on

7   foundation grounds. You're asking about the toxicity of

8   chemicals?

9   MR. RICHARD: Oh, no. I'll rephrase.

10   Thank you, Your Honor, for the guidance.

11   Q.   (BY MR. RICHARD:) In your line of work, are you

12   generally familiar with -- environmental professionals, are

13   they, in your experience, familiar with the MCL?

14   A.   Yes.

15   Q.   And are they generally familiar with something

16   called the MCLG?

17   A.   Yes.

18   Q.   Okay. And without getting into any medical opinion,

19   what MCLG number did you work with in this case?

20   A.   Well, the U.S. EPA puts out documents about what the

21   MCLG is for the different regulated contaminants. And so I am

22   aware of the MCLG for the contaminants that we are working with

23   here based on the U.S. EPA's documents.

24   Q.   And what was that number that you worked with here?

25   A.   For TCE and PCE, the U.S. EPA identifies it as zero.

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1   Q.   Okay. Thank you very much. I may have a few

2   questions after Mr. Gallagher talks to you, but thank you.

3   A.   Thank you.

4   THE COURT: Mr. Gallagher, cross-examination.

5   **CROSS-EXAMINATION**

6   BY MR. GALLAGHER:

7   Q.   Mr. Najm, have there been any detections above the

8   MCL for PCE and TCE in any of the four wells at issue -- S-1,

9   S-2, V-201, V-205?

10   A.   Not that I'm aware of.

11   Q.   Has any regulatory agency required treatments that

12   you're recommending -- strike that.

13   Has any regulatory agency required any treatment for

14   VOCs in any of those four wells?

15   A.   The State Division of Drinking Water has set an

16   operational goal of zero for those contaminants.

17   Q.   Okay. The operational goal is in reference to which

18   wells?

19   A.   Um, I'm trying to remember. I believe it is 201,

20   but I'm not 100 percent sure.

21   Q.   I think you're referring to S-1 and S-2 and the

22   SPTF. Does that ring a bell?

23   A.   It's possible.

24   Q.   And the operational goal is to meet non-detect;

25   correct?

UNITED STATES DISTRICT COURT

1   A.   That is my understanding, yes.

2   Q.   And if they cannot meet the operational goal, do you

3   know if there's any limitation on whether or not they can sell

4   that water as is?

5   A.   Every water plume plant has a permit, and that gets

6   defined into the permit. What goes into the permit becomes

7   what that treatment system must achieve to be in compliance

8   with the State's requirements.

9   Q.   As you sit here today, do you know if the plaintiff,

10   the agency, cannot meet its operational goal, can they still

11   sell the water with VOCs in it?

12   A.   That is up to the State.

13   Q.   So you don't know?

14   A.   Not as I sit today, correct.

15   Q.   Do you know whether or not the agency follows the

16   public health goal for VOCs set by California?

17   A.   I do not know.

18   Q.   Do you know what the public health goal set by

19   California is for VOCs, specifically TCE?

20   A.   I do not have that number, no.

21   Q.   Okay. Do you know what the current detections are

22   of VOCs in the four wells at issue?

23   A.   The levels that I've reviewed I included in my

24   report, and one of them was shown as an exhibit here.

25   Q.   And that was for S-1; correct?

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1   A.   That was shown, yes. But in the report, there are

2 levels for all four, all four.

3   Q.   For S-2, as of April 26, '21, do you know if the

4 levels were non-detect for PCE and TCE?

5   A.   If you can clarify, what do you mean "as of"?

6   Q.   As of April 26, '21, the last data set provided to

7 GAMA -- and we'll get into that, what GAMA is -- the last data

8 set and concentrations for PCE and TCE were non-detect. Are

9 you aware of that?

10   A.   The last one-day sample that was taken.

11   Q.   Correct.

12   A.   That I am aware of.

13   Q.   Do you recall what the detections were -- last

14 detections were of VOCs in 205?

15   A.   I do not.

16   Q.   As of April 28, '21, are you aware that for PCE, it

17 was non-detect?

18   A.   I don't have it in front of me. I do not recall.

19   THE COURT: And, Mr. Gallagher, establish a

20 foundation first. If there's not, don't tell him what you

21 believe the numbers were because that's testimony.

22   MR. GALLAGHER: Fair enough.

23   Q.   (BY MR. GALLAGHER:) Do you know the acronym GAMA,

24 what that stands for?

25   A.   Yes.

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 1        Q.    And what does it stand for?

 2        A.    It is an online database that stores water quality

 3   data about different wells across the state.

 4        Q.    And how does that data get transmitted from the

 5   water agency to GAMA?

 6        A.    I am not sure of the procedure, but it is

 7   transferred from either the water agency or the laboratory.

 8        Q.    And these laboratories that are used by the water

 9   agency, I'm assuming they're approved by the State of

10   California in order to transmit -- test the water and transmit

11   it to this GAMA service?

12        A.    I didn't hear a question.  I'm sorry.

13        Q.    I'm asking whether or not -- if you understand that

14   these labs that do the testing, the water quality testing, I'm

15   assuming they're certified by the State of California, if you

16   know?

17              MR. RICHARD:  Objection.  Lacks foundation.

18              THE COURT:  Sustained.

19        Q.    (BY MR. GALLAGHER:)  Do you generally -- the data

20   that you used for your S-1 report, did that come from the GAMA

21   website?

22        A.    No.

23        Q.    Where did it come from?

24        A.    I received it from the water agency.

25        Q.    And does that same water agency provide that same
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1 data to GAMA, if you know?

2   A.   You're asking me to speculate. I don't know.

3   Q.   I was asking you if you know.

4   THE COURT: All right. You got the answer.

5   Q.   (BY MR. GALLAGHER:) Okay. The data that you have

6 that you relied on, does it show the most recent results of the

7 concentrations of VOCs detected in any of the four wells at

8 issue?

9   A.   The data that I have showed the detections from 2016

10 through 2021.

11   Q.   Okay. And the most recent data -- do you have any

12 reason to disagree that the most recent data in S-2 was

13 non-detect for VOCs?

14   A.   I don't remember every number that's in that chart.

15 Those charts have data that go below the detection, then go

16 above the detection, then go below the detection, then go above

17 the detection. So those numbers are there. There's no dispute

18 about the presence of those chemicals in the water.

19   Q.   You explained earlier in testimony that you provided

20 obviously cost estimating services; correct?

21   A.   That is correct.

22   Q.   Do you have any understanding of what's been done in

23 terms of wellhead treatment on any of the wells that are owned

24 or operated by the agency?

25   A.   I am familiar with the treatment systems that have

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1   been put at Saugus 1 and 2 as well as 201 as part of my report

2   preparation.

3   Q.   Okay. You are also aware that they performed or

4   installed wellhead treatment at Q-2; correct?

5   A.   That is my understanding, yes.

6   Q.   And this technology, as you said, it's been around

7   for a while; correct?

8   A.   Which technology, sir?

9   Q.   This GAC technology.

10   A.   GAC treatment? Yes.

11   Q.   And vessels, we know, generally, that they're used

12   in this process; correct?

13   A.   I don't understand the question.

14   Q.   Vessels, they're used in the GAC treatment process;

15   correct?

16   A.   Yes.

17   Q.   And did you get a chance to discuss what the

18   agency -- what they had done with respect to 201 in installing

19   wellhead treatment?

20   A.   I did not have direct conversation about what they

21   did at 201. I am familiar with what is existing at 201.

22   Q.   Do you know when that wellhead treatment was

23   installed at 201?

24   A.   Um, probably four years ago is my understanding.

25   Q.   Do you know if the same type of wellhead treatment

 1 | was installed at Q-2?

 2 | A.   Um, I am not familiar with the details of Q-2.

 3 | Q.   Um, do you know the type of wellhead treatment they

 4 | installed at 201?

 5 | A.   It is pressure vessel systems for perchlorate

 6 | removal.

 7 | Q.   And the system and the way it's set up for

 8 | perchlorate, is it similar to the system that's installed for

 9 | GAC, GAC?

10 | A.   Not at all.

11 | Q.   Okay. Do you have vessels?

12 | A.   Yes.

13 | Q.   With perchlorate treatment?

14 | A.   Yes.

15 | Q.   Okay. Do you have vessels for GAC treatment?

16 | A.   Not at 201.

17 | Q.   Not at 201. But generally speaking?

18 | A.   What do you mean do you have vessels for GAC

19 | treatment?

20 | Q.   I'm trying to compare the wellhead treatment for

21 | perchlorate versus wellhead treatment for VOCs.

22 | A.   Okay. So what's the question?

23 | Q.   The question is: You used vessels for wellhead

24 | treatment in perchlorate; correct?

25 | A.   Correct.

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 1        Q.    You used vessels for wellhead treatment for GAC;

 2    correct?

 3        A.    That is correct.

 4        Q.    Okay.  You have electrical and foundation issues and

 5    grading issues that you would use for wellhead treatment for

 6    perchlorate; correct?

 7        A.    That is correct.

 8        Q.    And you would do the same for VOC treatment;

 9    correct?

10        A.    There would be differences.

11        Q.    There would be differences.  Okay.

12              Did you have an ability to pull or discuss with the

13    agency what it actually paid for wellhead treatment at 201?

14        A.    No, I did not.

15        Q.    Okay.  And you were aware of wellhead treatment for

16    perchlorate at Q-2; correct?

17        A.    Uh, not in much detail, no.

18        Q.    Now, you have performed -- provided the agency with

19    estimates for S-1, S-2, GAC, GAC treatment -- isn't that

20    correct? -- prior to providing this report?

21        A.    There was a request that I replied to at the time to

22    give them an estimate of GAC treatment, as I understood their

23    need, in 2019, I believe, or something like that.

24        Q.    And in 2019, do you recall how many vessels you

25    recommended there?
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UNITED STATES DISTRICT COURT

1   A.   Um, in 2019, I developed a cost estimate based on

2   four vessels, which I also noted to the district to be aware

3   that this number of vessels that are in that cost estimate may

4   not be acceptable to DDW because it did not configure it in a

5   lead-lag filter configuration that I just discussed earlier.

6   So at the time, I cautioned that that cost estimate

7   could be increased if the State rejects that configuration that

8   was in that memo.

9   Q.   And speaking of DDW, who is the DDW?

10   A.   DDW is the state regulatory agency. It refers to

11   the Division of Drinking Water of the state regulatory agency.

12   That's what DDW refers to.

13   Q.   And you just mentioned that you were referring to

14   S-1, S-2 and the potential that DDW might require more there --

15   correct? -- in terms of VOC treatment?

16   A.   I don't know what DDW might or might not. What I

17   said is that this configuration may not be acceptable to them

18   and they may require a lead-lag configuration which would raise

19   the number of vessels to six.

20   Q.   And as you sit here today, has the DDW required

21   anything more by way of VOC treatment at S-1 and S-2?

22   A.   They have not identified, to my knowledge, what it

23   is they required, whether it's the four or the six.

24   Q.   Or any type of GAC treatment; correct?

25   A.   At this point, I don't know what DDW will do, what

1 DDW does.

2   Q.   Now, the agency, when they retained you, asked you

3 to evaluate whether or not GAC would be an appropriate remedy

4 to treat VOCs; correct?

5   A.   That was one of the questions I replied to, yes.

6   Q.   Did you ever ask them what it is they are proposing

7 for VOC treatment at 201 with respect to the DDW?

8   A.   I did not ask them what they are proposing because

9 that's not part of my professional evaluation. I looked at the

10 overall issue from what I know DDW requires of water systems

11 and groundwaters that have been defined under the 97-005 state

12 criteria, and that criteria defines different groundwaters as

13 whether they are severely impaired sources.

14   So from my professional experience, when there is a

15 designation of a severely impaired source, DDW elevates the

16 significance of treatment needed.

17   And in all the applications that I've seen where a

18 groundwater system is under a severely impaired classification,

19 as I understand this -- what this system has been classified,

20 this groundwater, then under that classification, they will

21 require, to my knowledge and my experience, the lead-lag

22 configuration.

23   Q.   Have you ever engaged the DDW in the 97-005

24 permitting process?

25   A.   Um, I have worked on projects that have gone through

1   that certification with DDW, and I've been part of the team;

2   correct.

3   Q.   Now, have you ever calculated the MCL equivalency?

4   A.   Um, not to my recollection.

5   Q.   And do you understand what the MCL equivalency is as

6   it relates to the 97-005 permit?

7   A.   I am aware of what it means, yes.

8   Q.   Okay. Have you seen whether or not the agency has

9   submitted the MCL equivalency calculation to the DDW for 201?

10   A.   I don't recall.

11   Q.   What's the significance of an MCL equivalency that's

12 1 or lower?

13   A.   When there is a severely impaired source that has

14 multiple contaminants, the State is not just looking at one

15 contaminant but is worried about people drinking water that has

16 multiple contaminants. And so they try to develop a

17 calculation that adds up the potential impact of each

18 contaminant that they are aware of in the calculation of this

19 general MCL to address the different contaminants that is in

20 the water.

21   Q.   And if the MCL equivalency score or rating is 1 or

22 less, what's the significance of that as it relates to the DDW

23 and the 97-005 permitting process?

24   A.   It simply means that, if this were a single

25 contaminant, this is equivalent to being that single

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1 contaminant below its MCL.

2   Q.   Okay. Now, in the agency's request that you

3 evaluate GAC, did you evaluate whether or not blending would be

4 an appropriate fix to address any VOCs in their water?

5   A.   I did not look at blending.

6   Q.   Okay. Do you know what success the agency is having

7 with respect to blending at S-1 and S-2 in terms of VOC

8 concentrations?

9   A.   I am not aware of their success rate at S-1, S-2, if

10 they are blending.

11   Q.   In terms of costs -- we talked about that a little

12 bit -- you mentioned that the cost for 205 was a bit higher

13 because you were combining both perchlorate treatment and GAC

14 treatment; correct?

15   A.   That is not proper characterization. I said one of

16 the factors was that it included both GAC as well as

17 perchlorate, but I also listed other factors that are unique to

18 that well relative to the others.

19   Q.   Fair enough. I didn't mean to put words in your

20 mouth.

21   What I was trying to get at is: Do you know, if it

22 was perchlorate only, what the cost of treatment would be at

23 205?

24   A.   I did not go through those numbers, no.

25   Q.   In terms of O&M, you mentioned that 30 years is the

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1   generally accepted time frame -- correct? -- or something along

2   those lines?

3   A.   Correct.

4   Q.   Okay. Um, did you factor in the current detections

5   at S-1, S-2, V-205, V-201 in trying to establish what a

6   reasonable estimate might be for the future operations of these

7   treatment systems?

8   A.   Uh, based on the values that I had today, I had to

9   put an estimate of how frequently the GAC needs to be replaced

10   and that was part of the annual O&M number.

11   Q.   Okay. And given that there are a number of

12   non-detects as of late per the data you relied on, how certain

13   are you that treatment will be needed in the next five years?

14   A.   Considering that there have been many detects over

15   the last five years, I am certain that treatment will be needed

16   for a while.

17   Q.   And when you say "treatment will be needed," the

18   agency is not requiring -- excuse me -- no regulatory agency is

19   requiring any treatment at this time; correct?

20   A.   I understand that the regulatory agency is in the

21   discussion process and evaluation process. But what the

22   regulatory agencies are going to do or not do, I am not

23   testifying about. That is up to the Court and the agencies as

24   to whether those chemicals need to be removed from the water.

25   Q.   And if they decide that these VOCs do not need to be

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 1   treated -- well, strike that.

 2              In terms of costs, do you have an understanding of

 3   how much it costs to install the wellhead treatment for

 4   perchlorate at 201?

 5        A.    I did not review those cost estimates, no.

 6        Q.    For the cost estimating that you did, I think you

 7   testified that in a typical situation -- correct me if I'm

 8   wrong -- but in a typical situation, you were asked to do

 9   something that a client may have not done before.  So you're

10   trying to give them a reasonable estimate of what it may cost

11   them in the future.  I think you gave the house as an example.

12   Is that fairly accurate?  If I'm not, please --

13        A.    It is not accurate.  It has nothing to do with

14   whether they have done it before or not.

15        Q.    Okay.

16        A.    It has to do with what the cost of it is going to be

17   to do it now.

18        Q.    Oh.

19              And I think you gave this example of the house.  So

20   if somebody wanted to build a house, you would design a cost

21   estimate for the house.  You'd get the building materials.  You

22   would get the design plans.  You would get the, you know,

23   labor, et cetera, et cetera.  And you'd combine that all in and

24   give your best estimate as to what that may cost in the future;

25   correct?
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1   A.   Not at the conceptual engineering level, which is

2   what I was working on. What you described is the full detailed

3   design that gets spent on developing all the details to get the

4   detailed cost estimate. What I was describing earlier as an

5   example is, if someone asks you today how much does it cost me

6   to build a house over there and you are sitting there and

7   waiting for an answer, that is an answer that has a lot of

8   estimates in it based on the estimator's experience and based

9   on their knowledge of what the current market is for building a

10   house.

11   Q.   Fair enough.

12   Would it be reasonable for an estimator, then, to

13   also look, say, next door at a house that was just built to

14   understand what that house might cost when providing these

15   estimates to your client?

16   A.   The direct answer to your question is no because

17   "just built" means anything. If it's just built yesterday

18   versus a year ago versus five years ago, makes a big difference

19   in today's market and any market. That's number one.

20   Number two, you use that as a check maybe on your

21   procedure, but you never use that as saying, oh, that house

22   costs 150,000 to build so your house is 150,000 to build.

23   So the answer to your question is no. There is more

24   to it than just saying that costs this much; therefore, yours

25   is going to cost this much.

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1   Q.   But you would rely on it to some degree; correct?

2   A.   I would not rely on it. I use it as a check of my

3 assumptions.

4   Q.   As a tool to guide you in providing a better, more

5 accurate estimate; correct?

6   A.   That's not what I said. I use it as a check on my

7 assumptions.

8   Q.   Fair enough. Thank you.

9   THE COURT: Redirect.

10   MR. RICHARD: Yes, sir. Yes, Your Honor.

11   **REDIRECT EXAMINATION**

12 BY MR. RICHARD:

13   Q.   I think I just have a couple points.

14   You were just asked by Whittaker's attorney whether

15 you were familiar with any of the treatment plants or

16 facilities at Santa Clarita Valley Water Agency. And you

17 talked about V-201, that was about four years ago. You told us

18 you didn't know much about Q-2.

19   Are you familiar with -- I think you mentioned this

20 on direct. But are there other treatment plants more recent

21 than four years ago involving GAC treatment that you are

22 familiar with at the agency?

23   A.   Um --

24   MR. GALLAGHER: Beyond the scope, Your Honor.

25   THE COURT: Overruled.

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1   THE WITNESS: I am familiar with a more recent

2   system that is not GAC treatment but is using the same vessels

3   and the same filters that are used for GAC treatment, yes.

4   Q.   (BY MR. RICHARD:) And the system you're familiar

5   with, is that the end well that you mentioned earlier?

6   A.   That is the end well treatment system, yes.

7   Q.   And how many vessels were used in that system?

8   A.   I believe it's six vessels.

9   Q.   And how recent was that system -- is that a system

10   that has been built?

11   A.   Yes. That system was built in 2020.

12   Q.   And are you familiar with the cost for that as-built

13   system from 2020 using six vessels?

14   A.   To my understanding from the numbers that I saw, it

15   was about 7.7 million.

16   Q.   And while you wouldn't rely on that to develop a

17   cost estimate, as you just explained for the jury, does that

18   provide a check for the work you did in this case?

19   A.   Absolutely it does.

20   Q.   And can you explain that briefly?

21   A.   Sure.

22   So I developed the cost estimates for Saugus and 201

23   and 205 based on the -- the recommended guidance from the AACE.

24   And what I look at, then, is to say, okay, I developed this

25   cost estimate for this treatment system that has six vessels,

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1   similar configuration. And I look at how much the end well

2   costs and -- to compare whether I am close to that number in

3   that cost estimate, which was done a little -- a little later

4   but, again, things have changed.

5   Q.   Okay. And you were asked about an estimate you

6   provided to the water agency regarding -- I think it was

7   Saugus -- GAC treatment at Saugus water treatment plant. Do

8   you recall that just a few minutes ago?

9   A.   Yes, I do.

10   Q.   And I'd like to show you -- because that was not

11   just an oral estimate. Did you prepare that in writing?

12   A.   Yes, I did.

13   Q.   And I'd like to show you what has been marked in

14   these proceedings as Exhibit 516.

15   (Exhibit 516 received into evidence.)

16   MR. RICHARD: And I believe there's -- let's not

17   publish it yet.

18   I confess, Your Honor, I don't recall. I wasn't

19   expecting to show this to him but, since it came up, I believe

20   it's stipulated to, but --

21   MR. GALLAGHER: We'll stipulate to it.

22   MR. RICHARD: Okay. It has been stipulated to.

23   Thank you.

24   If we can publish Exhibit 516, which is a document

25   dated June 8th, 2018.

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1   Q.   (BY MR. RICHARD:) And this is from you, Dr. Najm.

2   It says from Issam Najm, Ph.D., PE. Is that you?

3   A.   It's not on my screen yet.

4   Q.   Oh.

5   A.   Sorry.

6   MR. RICHARD: We crashed it. Sorry, Your Honor.

7   THE COURT: It's up to you. You can pause if you'd

8   like, or you can -- if you want to come back to it,

9   Mr. Richard.

10   MR. RICHARD: You know, this is the last point.

11 With the Court's permission, since it's stipulated, I'll just

12 ask a few questions. And if we're lucky, it will pop up. If

13 we don't, it will be in evidence.

14   THE COURT: However you choose.

15   MR. RICHARD: Thank you, Your Honor.

16   Q.   (BY MR. RICHARD:) So this estimate is dated

17 June 8th, 2018. I think you thought you might have provided it

18 in 2019, but let's start there. Did you prepare an estimate in

19 2018?

20   A.   I prepared -- there we go. I prepared an estimate.

21 I don't know if I can see it all the way on the screen behind

22 you. But the date on that memo would be the date I prepared

23 the estimate. It's not on my screen.

24   MR. RICHARD: Anybody else see it?

25   THE COURT: It is appearing on the Court's screen.

UNITED STATES DISTRICT COURT

1   It may be an issue with his screen. One moment.

2   Q.   (BY MR. RICHARD:) Dr. Najm, I think this exhibit

3   may be in one of the binders in front of you.

4   A.   May I look?

5   THE COURT: Why don't you turn it on and off, if you

6   can, Victor.

7   THE COURTROOM DEPUTY: It's on.

8   THE COURT: Thank you.

9   Q.   (BY MR. RICHARD:) And I will -- can you see it?

10   A.   Yes.

11   Q.   Oh. Super.

12   So can you tell us what this technical memorandum

13   that's entitled "Draft" is?

14   A.   Yes. This was a technical memorandum that I

15   prepared in a response to a request from the district to give

16   them a cost estimate for putting VOC treatment at -- I believe

17   the Saugus well.

18   MR. RICHARD: And if we can enlarge the bottom of

19   page 1.

20   Q.   (BY MR. RICHARD:) There's a sentence that begins:

21   "Table 1 presents a summary." And you're referring to four

22   vessels here. Then the third line down, you refer to it as

23   "including parallel trains." Can you explain what you're --

24   what the four vessels -- I don't want to read the whole

25   paragraph but --

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1   A.   Sure.

2   Q.   Explain, again, the difference between parallel

3   systems and lead-lag systems.

4   A.   All these treatment systems have parallel trains in

5   the sense that water comes in from the well, 2,000 gpm -- let's

6   just work with numbers -- and let's say we split them into four

7   parallel trains, 500 each. Okay? So 500 in each train is

8   what's flowing.

9   In this initial cost estimate, I had one filter on

10 each of these trains treating, let's say, 500 gpm, or gallons

11 per minute, through each.

12   MR. RICHARD: Okay. And if we can turn to page 2,

13 that top -- let's say top six, seven lines of that paragraph,

14 if we can enlarge that.

15   Q.   (BY MR. RICHARD:) And so you see three lines down,

16 there's a sentence that begins: "If the system has to be

17 configured in a lead-lag formation," do you see that?

18   A.   Yes.

19   Q.   You say, quote, "then three parallel trains will be

20 required for a total of six vessels," period, close quote?

21   A.   Correct.

22   Q.   And it's the six vessels that you told them might be

23 required back in 2018 that you used for your estimate in this

24 case?

25   A.   That is correct.

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1   Q.   And there's a chart, Table 2. Then you talk about

2   flow rate, 2,200 gallons per minute. Do you see that?

3   A.   Yes, I do.

4   Q.   Same page, Exhibit 516, page 2. So the flow rate,

5   is that same flow rate you used here?

6   A.   Yes. 2,200 gallons per minute.

7   Q.   And that EBCT time -- EBCT time, the time that the

8   carbon should be in contact with the water, 10 minutes, that's

9   the same time you used?

10   A.   No. This is actually higher than the number I used

11   in this -- in the cost estimate that I prepared in this case.

12   Q.   Okay. And how would seven-and-a-half minutes -- is

13   that a more conservative number? How did that impact your work

14   in this case?

15   A.   Seven-and-a-half minutes is less conservative in the

16   time -- in other words, I am giving the water less time in

17   contact with the carbon in each vessel because I'm recognizing

18   that there's two filters.

19   So, you know, whether I'm doing it in a case or I'm

20   advising a water agency, I can shave some time off of the

21   contact time in the filter to get a little more efficient

22   system -- I mean, economically efficient system and have just

23   seven-and-a-half minutes in each.

24   So that's why the four trains did not necessarily

25   double to eight in this estimate if we go to lead-lag. I'm

1   able to squeeze more through each train, and so we ended up

2   with only six.

3   Q.   Okay. And so the chart you prepared is for the

4   four-vessel system in parallel, not lead-lag. That's what

5   we're looking at in this exhibit, 516; is that right?

6   A.   That is correct.

7   Q.   And it's fair to say that you also told the agency,

8   if they were going to use lead-lag for the same well treatment,

9   they would need six vessels?

10   A.   That is correct.

11   Q.   And that's still your testimony?

12   A.   Yes, it is.

13   MR. RICHARD: I think that's all I have, Your Honor.

14   Thank you very much.

15   MR. GALLAGHER: Just briefly.

16   THE COURT: Yes.

17   **RECROSS-EXAMINATION**

18   BY MR. GALLAGHER:

19   Q.   Dr. Najm, you talked about the end wells that you

20   apparently relied on as a check -- correct? -- just a minute

21   ago?

22   A.   I did not rely -- the word "rely" has a lot of

23   meaning. I did not rely on it. I used it to confirm that my

24   procedure was appropriate in the number that I came up with.

25   Q.   Do you have an understanding of what the end well

1 treatment system is?

2   A.   It is a -- an ion exchange treatment system using

3 six pressure vessels to treat for other chemicals.

4   Q.   PFAS or PFOAs, are those the chemicals?

5   A.   That is correct.

6   Q.   And the end well treatment system, was it combining

7 a number of end wells and pumping that water from those wells

8 into a treatment facility to treat for PFAS?

9   A.   Yes, it is.

10   Q.   And that's similar to the SPTF in a way; correct?

11   A.   Similar in what ways?

12   Q.   Well, you're taking two wells and piping it into a

13 treatment system, but that treatment system in that case is

14 treating for perchlorate?

15   A.   Yes.

16   Q.   Okay. The treatment systems at 201 and 205, they're

17 simple wellhead treatment systems, aren't they?

18   A.   They're all wellhead treatment systems. The

19 question is -- sometimes you have one well that's producing the

20 water for the treatment system, sometimes there's two wells,

21 sometimes there are three wells, but they're all wellhead

22 treatment systems.

23   Q.   Fair enough.

24   And the single-well wellhead treatment systems being

25 proposed are being proposed for 201 and 205; correct?

1   A.   I based the number on the production of one well --

2   Q.   Just yes or no. It's just yes or no. They're

3 single-well wellhead treatment systems at 201 and 205 being

4 proposed; correct?

5   A.   There is one well at each of those plants that are

6 right now producing water for those treatment systems.

7   Q.   And the same is true for Q-2, if you know?

8   A.   I don't know.

9   Q.   Now, the document that counsel just showed you,

10 Exhibit 516, your 2018 estimate, you did that for the agency;

11 correct?

12   A.   Yes, I did.

13   Q.   That was done to the best of your ability; correct?

14   A.   It was done based on my understanding of the facts

15 at that time.

16   Q.   And that was done at the direct request of the

17 agency and not pursuant to litigation; correct?

18   A.   That is correct.

19   Q.   What you prepared for your report, that was done

20 pursuant to litigation; correct?

21   A.   I prepared it as part of my expert testimony,

22 correct.

23   MR. GALLAGHER: Nothing further. Thank you,

24 Your Honor.

25   THE COURT: Anything further?

1215

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 1              MR. RICHARD:  No, Your Honor.  Thank you.

 2              THE COURT:  All right.  You're excused.  Please

 3   watch your step going down.

 4              Any further evidence, Mr. Richard?

 5              MR. RICHARD:  Just subject to double-checking the --

 6              THE COURT:  You can leave everything down.  Just

 7   please watch your step going down.  Thank you.

 8              Mr. Richard?

 9              MR. RICHARD:  Yes, Your Honor.  Subject to checking

10   the exhibits to make sure they're in evidence and so working

11   with the Court on that, the plaintiff rests.

12              THE COURT:  And that includes with the deposition

13   issue that you had alluded to?

14              MR. RICHARD:  Yes, Your Honor.

15              THE COURT:  Very well.

16              So, ladies and gentlemen, as I mentioned yesterday,

17   once the plaintiffs rest, I was going to release you.  And it's

18   actually a little bit earlier than I had suggested, which is

19   good news so that you can get your start on the Thanksgiving

20   holiday weekend.

21              First, let me start by thanking you for your careful

22   attention.  I have noticed and you all are, I think, doing your

23   best to pay attention in a case that's fairly technical and, I

24   think, calls upon you to pay careful attention.  So thank you

25   for that.
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1   I will, as I said, let you know if I learn news from

2 Juror No. 7 that you need to act upon. I hope that will not in

3 any way disturb you or occupy your mind but, rather, that you

4 will focus on having a fun holiday with your family.

5   So with that, I am going to excuse you until Monday

6 morning. So Monday morning, please return, as you have been

7 doing, by 8:30.

8   And I also want to thank you, you're all really good

9 about getting here in advance of that 8:30 timeline so that we

10 can get started at 8:30 sharp.

11   So have a wonderful holiday, everyone. We will see

12 you on Monday morning. Thank you.

13   THE COURTROOM DEPUTY: All rise for the jury,

14 please.

15   (Out of the presence of the jury:)

16   THE COURT: Please be seated.

17   We are outside the presence of the jury.

18   And I do want to address a few items while we have

19 some time.

20   The first is that the Court would appreciate

21 receiving from each side the key documents in the case. And

22 what I mean is I'm going to give each one of you an opportunity

23 to provide the Court with what I hope is really no more than a

24 binder -- if it's a couple of binders, it's a couple of

25 binders -- but of the key exhibits that you would like the

1   Court to particularly focus on. So plaintiff can provide the

2   key documents from your perspective, and the defense can do the

3   same.

4   I'm not going to direct you to get it to me today.

5   But if you can get it to me today, that would be useful because

6   I will intend to look at it over the next several days.

7   You can get it to me by Monday if you wish, but we

8   will be in trial. My time will simply be more limited. It

9   doesn't mean I won't review it. It just means that I will have

10 perhaps less time to be able to review the key documents.

11   You can provide the Court with the key documents if

12 you do get them to me by today by close of business. You can

13 coordinate with Mr. Cruz in that regard.

14   Also, I do want to address a couple of issues

15 concerning jury instructions. And we will be talking about the

16 jury instructions starting on Monday. But in advance of that,

17 I have a couple of matters that I wanted to bring to your

18 attention.

19   The first is the parties dispute the instruction

20 concerning negligence per se. And the plaintiff has provided

21 most recently two potential legal sources that implicate the

22 negligence per se doctrine. And they are Los Angeles County

23 Code Sections 20.36.010 and 20.36.470.

24   The parties have largely focused on the procedural

25 questions about whether it is appropriate for the Court to give

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1   an instruction based upon a newly introduced Code section or

2   sections. And the Court wants to get the parties' position on

3   the merits in addition to the procedural question.

4   I will tell you that the procedural question is not

5   entirely clear to the Court, that is, the answer to the

6   procedural question is not entirely clear to the Court.

7   There is unpublished lower court authority that

8   suggests that an eleventh hour introduction of a Code section

9   or sections as the predicate for the negligence per se doctrine

10   should be excluded, as it's prejudicial to the defense.

11   I share the concern about an eleventh hour

12   introduction. The plaintiff in this case has focused both, I

13   believe, in its operative pleading as well as mostly through

14   the trial submissions has focused on federal law largely --

15   CERCLA, RCRA, and the like -- and only recently has pulled out

16   these Code sections.

17   The reason the Court is not entirely clear about

18   whether to follow those cases is because they are fairly

19   conclusory. They assert the concern for prejudice, but they

20   don't really elaborate on what the prejudice is. And I don't

21   believe that Whittaker has really presented the Court with how

22   it actually would be prejudiced.

23   This is a jury instruction. It's a legal question.

24   And it's just not obvious to me what the prejudice is. I don't

25   mean to suggest that Whittaker would not be prejudiced. And

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1 again, I am generally inclined to be concerned about having

2 something like this brought up at such a late hour.

3   It also imposes a burden on the Court. The Court

4 attempts to get the issues all flushed out and have the parties

5 identify the issues and is confronted with a last-minute, new

6 statute that's being relied upon.

7   So that's the reason I also want to consider the

8 merits in addition to the procedural propriety.

9   And with regard to the merits, the question that the

10 parties, I believe, have not addressed is whether these Code

11 sections create a presumption of negligence per se. That is to

12 say, in this Court's view and understanding, not every single

13 statute or law necessarily sets the relevant standard of care

14 that potentially creates a presumption of negligence per se or

15 creates negligence per se for purposes of presenting the

16 instruction to the jury.

17   So that is the parties' task at this point, is to

18 brief the issue as to whether these two Code sections, in fact,

19 create a presumption of negligence per se. And again, the

20 Court's understanding, generally speaking, is that may have to

21 do with, among other things, whether it sets a standard of care

22 that is relevant in this case.

23   I do not intend to limit the parties to the Court's

24 understanding. The purpose is for you to educate the Court to

25 make a determination, if I reach the merits, whether these two

1   Code sections properly give rise to a presumption of negligence

2   per se.

3   That's one issue with respect to the jury

4   instructions.

5   The next issue has to do with the measure of damage

6   for restoration. And the parties have provided to the Court

7   the standard CACI instruction on the measure of damage being

8   the lower of the repair costs or diminution in value. That is

9   a long-standing measure of damage appropriate when dealing with

10   property damage.

11   The question that the Court has that the parties

12   have not addressed is: What happens in the event that there is

13   no evidence of diminution in value?

14   At least as I understand the evidence, there is no

15   evidence at all about property, I don't even think property

16   ownership, let alone value of the property, diminution in value

17   of the property. If my memory serves me properly, I've heard

18   nothing about property. It's possible that I overlooked a

19   reference by Mr. Abercrombie with regard to who owns the

20   property and the like, but that's really not at least the

21   central point here.

22   The point is that the parties essentially are asking

23   for Whittaker that I give the diminution in value alternative,

24   and the plaintiff is saying don't give it. And the question

25   is: Well, on a record where there doesn't appear to be an

1221

1   issue of diminution of value, do I give the instruction that

2   includes the lesser of or don't I?

3   And that may depend upon, in part, who has the

4   burden. That is to say that, of course, plaintiff has the

5   burden of proving damages. It's not clear to me that that

6   answers the more refined question about whether the lesser of

7   is only implicated when a party, perhaps the defendant, raises

8   a question about diminution in value being a lower value.

9   I'm sure all counsel are aware of the sort of

10   classic measure of damage model or hypo that gives rise to this

11   as simply as possible, and that is you have a vehicle that is

12   damaged and the damage to the vehicle is $2,000 but the

13   vehicle's only worth a thousand dollars, the concept of the

14   vehicle being totaled.

15   Well, if the plaintiff presents evidence that the

16   repair cost is $2,000 and there's no evidence presented as to

17   the value of that vehicle, what then? Is that a failure of

18   proof on the part of the plaintiff that essentially requires a

19   verdict on that issue in favor of the defense, or does the

20   absence of that evidence mean that the defendant is not

21   entitled to an instruction on the diminution in value which

22   serves to protect a defendant?

23   So there you have the issue, and you ought to

24   address the Court about that.

25   Somewhat relatedly is the Court is not clear that it

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1   understands diminution in value and how that plays out in a

2   case of this type. This is not, obviously, a simple case like

3   the hypothetical that I gave, nor is it as simple as someone's

4   house has contamination on it and the question is: What is the

5   fair market value of the home? What is the cost of removing

6   the contamination?

7   This is a water agency. It's a business. And

8   there's a lot more to it as to how you would determine what the

9   fair market value of this property as an ongoing operation

10 serving water to a community would be.

11   So it's an interesting issue, I believe. The

12 parties have scratched the surface. But in my judgment, that's

13 all you've done.

14   And so I'm going to give you an opportunity to dig

15 deeper and provide the Court with the points and authorities as

16 to the issues that the Court has raised. And you'll have an

17 opportunity to do that.

18   The sooner you can get those to me, the better. I

19 prefer to get it Monday, but I realize that we have an

20 intervening holiday. And so I'm not going to direct that you

21 get it to me Monday. You can get it to the Court first thing

22 Tuesday morning, if you'd like. But once again, the sooner

23 that you get it to me, the more time that I'm going to have,

24 among the other things that I -- that are competing for my

25 time, to look at it.

1223

1   So the order is that you have to get it to the Court

2   first thing Tuesday morning. You have to e-mail this to the

3   Court by Tuesday morning.

4   And I'm basing that on Mr. Blum's representation --

5   not representation but estimate that he's going to go -- we're

6   going to go at least through Thursday. If there's a chance

7   that we're going to go only through Wednesday, then I'm

8   probably going to need to have this with the Court probably by

9   no later than close of business on Monday to give me at least

10   after hours to look at it.

11   MR. BLUM: There is that chance, Your Honor.

12   THE COURT: Then let's have it -- let's have it by

13   close of business on Monday. Again, if you can get it to me

14   sooner -- I don't know what your plans are. Hopefully it's not

15   to be working; although, I suspect, unless you're very

16   different from what I remember and doing, you'll be working

17   this weekend. But the sooner you can get it to me, the better,

18   because I will be looking at it.

19   Let me see if there's anything else. I believe that

20   covers it for now. I do have some other issues with the

21   disputed jury instructions, but those are the items I wanted to

22   bring to your attention sooner rather than later because they

23   required you to address the Court in writing.

24   I'm going to limit the briefing on the jury

25   instructions to no more than 10 pages all in. So each side

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1 will have 10 pages. And you can file your -- when you're --

2 when you're done, it's no later than close of business on

3 Monday. But if you have it sooner, you can get it to me

4 sooner. And please make sure that you're providing the Court

5 with a Word version through the chambers e-mail, which I

6 believe everyone has, and it will then be provided to the

7 Court.

8   Any questions about what the Court has stated, first

9 from you, Mr. Richard?

10   MR. RICHARD: No. My only question has to do with

11 witnesses for next week. So I can either ask my quick question

12 now or wait, Your Honor.

13   THE COURT: Just a moment. Let me see if the -- we

14 can close this issue off first.

15   MR. BLUM: Your Honor, I have no questions about

16 the -- no questions about the briefing.

17   In terms of the documents you want, some of these

18 documents are quite lengthy. And if we only want the Court to

19 deal with certain portions of it, what does the Court want us

20 to do?

21   THE COURT: That would be useful, if you could focus

22 the Court. So once again, use your judgment.

23   Let me just suggest this to you. It is not going to

24 be in your interest to provide the Court with just portions of

25 a document that favor you that don't give me the proper

1 | context. Because the other side is going to also get a copy of
2 | this. And if that happens, they can provide the Court with --
3 | with context. And, frankly, if it's obvious to the Court, it's
4 | not going to serve any party well in terms of my ability to
5 | rely upon you. So use your best judgment.
6 | I don't mean to suggest, by the way, that, if I
7 | conclude ultimately that it was helpful to see some --
8 | something else, that that means you haven't been honest with
9 | the Court. Those sometimes require judgment calls. So you
10 | should feel free to make a judgment call.
11 | Where I would be suspicious is, if you tell me --
12 | the document you give me, it says "X" on something significant
13 | and it's very obvious there is something else in that document
14 | that would put that in context or contradict it and I haven't
15 | received it.
16 | MR. BLUM: Your Honor, given the -- the extent of
17 | the ability of counsel, it would be sort of stupid of us to do
18 | that.
19 | THE COURT: I agree.
20 | MR. BLUM: The other thing is, Your Honor, then, may
21 | I present the whole document and say pages X, Y, and Z is the
22 | ones that we think the Court should look at?
23 | THE COURT: The problem is I'm not sure that I have
24 | all -- I mean, what I'm looking for is to get, if possible --
25 | MR. BLUM: Oh, we would -- I'm sorry, Your Honor.

UNITED STATES DISTRICT COURT

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 1    We would actually give you the document.

 2               THE COURT:  Yes.

 3               MR. BLUM:  And say these are the pages we think are

 4    relevant.

 5               THE COURT:  Yes.  That would be useful, yes.

 6               MR. BLUM:  The second one, considering the defense

 7    hasn't put on the case, I assume we're allowed to give you

 8    documents that we believe will be admitted into evidence during

 9    the defendant's case.

10               THE COURT:  You may.

11               MR. BLUM:  All right.

12               THE COURT:  And then, now for the witnesses?

13               MR. RICHARD:  Yes, Your Honor.  It's our

14    understanding that defense -- that Whittaker does not intend to

15    call Mr. Masard in the bench portion of the trial.  But given I

16    have to decide how I'm going to spend my weekend after turkey,

17    it would be helpful to confirm that on the record.

18               THE COURT:  Yes.

19               MR. BLUM:  That's confirmed, Your Honor.

20               THE COURT:  Thank you.

21               Any other witness issues before we break?

22               MR. BLUM:  Your Honor, the binders either are

23    sitting ready to give to you or you have them already -- I

24    don't know which one -- for the witnesses that are on Monday

25    and Tuesday and Wednesday -- Monday and Tuesday.
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UNITED STATES DISTRICT COURT

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 1              THE COURT:  All right.  So you have provided those

 2   to Mr. Cruz or will provide them?

 3              MR. BLUM:  Yeah.  They're here.  I don't know if

 4   they've actually been given to Mr. Cruz.

 5              THE COURT:  All right.  When we break, when we

 6   recess, if you could just coordinate with Mr. Cruz and I'll

 7   receive them.

 8              MR. BLUM:  And, Your Honor, just to be clear, we had

 9   talked the other -- yesterday about the defense wants to make

10   a -- I guess what used to be called a directed verdict motion.

11   We can deal with that whenever the Court wants to.

12              THE COURT:  We can do it right now.

13              MR. BLUM:  Your Honor, either I can make it now

14   orally or I can deliver it to the Court first thing Monday

15   morning in writing.

16              THE COURT:  I think it's fine if you want to present

17   it to the Court in writing, in which case I don't know that I'm

18   going to have a hearing.  It's possible that I will in the

19   afternoon.  But what -- what is it that you propose to do?  To

20   do both or simply to give something to the Court in writing?

21              MR. BLUM:  Your Honor, if I can be just brutally

22   frank, this is something we want you to be able to consider in

23   the best possible way.  So we will defer to what you think is

24   the best way.

25              THE COURT:  All right.  And I want to also make sure
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 1  that I give the plaintiff an opportunity to respond.  So I'm a

 2  little bit concerned about the timing on this.

 3              So if you get something to me by Monday morning,

 4  we're in trial, of course, and that gives little time for the

 5  other side to turn something around.

 6              MR. BLUM:  How about if I get it to him Sunday by

 7  noon?

 8              THE COURT:  Mr. Richard, I'm sure that's not

 9  especially welcomed, but it's better than Monday morning.

10              MR. RICHARD:  Yes, Your Honor.  I'm dying to just

11  hear some of the grounds.  I have no idea what this motion

12  might be based on.  With a little bit of direction, I can get

13  going on my opposition.

14              THE COURT:  Actually, I think that's a fair point.

15              Why don't you take to the lectern, Mr. Blum.  I'm

16  not going to ask you to go into detail, but perhaps you can

17  just give us the -- the bullet points on the issues that you

18  intend to raise.

19              MR. BLUM:  Sure.  Actually, I have my outline with

20  me.

21              THE COURT:  All right.  Let's go ahead and do that.

22              MR. BLUM:  Your Honor, there's a general -- there

23  will be a general one as to all causes of action.  And the

24  only -- and we're not dealing -- let me back up and -- these

25  are only issues we're going to move on that relate to issues to
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1   the jury. We're not dealing with the three causes of -- or

2   several causes of action that the Court has to deal with.

3   THE COURT: Yes.

4   MR. BLUM: As to those causes of action, each one

5   that has a punitive damage allegation we will be arguing that

6   the evidence has not substantiated that a reasonable juror

7   could on a basis of clear and convincing evidence find punitive

8   damages. So that's general.

9   Generally, also, as to restoration damages, which

10   would reply to most of the causes of action -- well, the first

11   one I had was the issue the Court already brought up.

12   We believe that either of the two alternatives the

13   Court has, if there is no evidence of diminution in value, is

14   that that's an admission the number is zero or it's a failure

15   of proof. And either way, actually it really doesn't matter

16   because the result should be the same.

17   The other issue is there's no evidence of what

18   property -- that they even owned the wells. The only thing

19   they've shown evidence that they've owned is the land under the

20   SPTF. And without any evidence of ownership of any property

21   related to the wells, there is no ability to restore anything

22   because the whole basis of this Court letting the issue of

23   restoration go forward was that there was actual land owned,

24   and there's no evidence of that.

25   Um, also, there's no evidence of the reasonable

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1 relationship between the cost of repair and the harm of the

2 VOCs. The -- there is no evidence that the VOCs have harmed

3 anything at all. There's no evidence that any regulator is

4 requiring treatment of the VOCs. There's no evidence that the

5 presence of the VOCs affect the water supply in any way, any

6 meaningful way. The evidence -- no evidence that the VOCs

7 mechanically affect the ability to pump, which just leaves the

8 issue of perchlorate and only as to Well 205.

9   Now, up until the last ten minutes of Dr. Najm's

10 testimony, I would have said that, assuming the other issues

11 are dealt with, such as diminution in value, that there is

12 evidence relating to perchlorate for Well V-205. The

13 difficulty is Dr. Najm testified that the estimates he made for

14 Well V-205 include both VOCs and perchlorate and he has no

15 opinion on what treatment would cost for perchlorate only.

16   So if they cannot prove that VOCs need to be treated

17 for V-205, they do not have any evidence of perchlorate either

18 because the two are tied together, according to Dr. Najm.

19   Um, as we get to the actual causes of action, the

20 third cause of action --

21   THE COURT: Actually, before you continue on so that

22 I understand your last point, which is not clear to me, so if

23 there's a treatment system and a cost associated to clean

24 perchlorate, why does it matter whether he has a separate

25 opinion that distinguishes between a system that screens out

1   perchlorate versus a system that screens out or filters for

2   both perchlorate and VOCs?

3   MR. BLUM: Because there's no evidence of what that

4   system would cost. It may be needed. But if they're asking

5   for damages, there has to be some evidence in the record of

6   what that restoration cost would be.

7   THE COURT: But -- so you're -- your point, then, is

8   one of necessity? Or is it one of a potential difference in

9   cost depending upon whether you're treating for perchlorate

10   only or treating for both perchlorate and VOCs?

11   MR. BLUM: Well, the questioning was by

12   Mr. Gallagher. Mr. Gallagher asked him what the treatment

13   costs were for the VOC system and the perchlorate system on

14   V-205, and Dr. Najm gave a number.

15   Then Mr. Gallagher asked, Do you have a cost

16   estimate if there was no need to treat VOCs and you only had to

17   treat perchlorate, which is what the defense believes needs to

18   be -- needs to happen? Dr. Najm said, No, I don't because the

19   systems are intertwined.

20   THE COURT: All right.

21   MR. BLUM: All right. Now, if we get specifically

22   to the causes of action in the prima facie case, the third

23   cause of action for negligence, there's basically -- they go to

24   paragraph 43 and 44 of the Complaint. The first one deals

25   with -- and I'm generalizing here -- about the prevention from

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1   contaminating the property. In other words, we did something

2   that contaminated the property with perchlorate and VOCs.

3   The evidence from Dr. Hughto, who's the only one

4   that testified as to what was done on the property,

5   specifically -- he specifically stated that he had no opinion

6   as to whether or not the contamination that he talked about was

7   deposited on the property pre-1967 or post-1967. And he also

8   said that the drums that he found on the property that he

9   testified about, he had no opinion about when they were put at

10   the property.

11   And considering the admission by all experts that

12   this property has been operating since at least the 1930s, that

13   they're finding in multiple landfills things like fireworks,

14   which Whittaker had nothing to do with and were manufactured in

15   the '30s, there is zero evidence that there was any disposal on

16   the property outside -- and this is the only evidence there

17   is -- outside of what would be called normal business

18   operations, such as the use of degreasers in the hog-outs.

19   I don't believe the evidence is enough, but that

20   is -- in terms of using my imagination, that would be the only

21   thing that they could even argue there is.

22   And in those instances, what the evidence doesn't

23   show is what happened to these operations pre- and post-RCRA --

24   or pre- and post-RCRA regulations. And there is no evidence

25   that we knew about the hog-out information because, as all of

1   the experts said, perchlorate wasn't on the -- was not on the

2   screen of -- in relation to groundwater contamination until

3   1997.

4   And VOCs, it was at the point of RCRA and the

5   plaintiff has produced no evidence that at the time when the

6   operations occurred, that we knew that the degreasing

7   operations were causing VOC contamination.

8   Now, in terms of remediation, there was a lot of

9   noise created about what was happening in 1980, 1981, and 1982.

10   Dr. Hughto said that these were the times when everybody was

11   trying to figure out what RCRA meant. And he did not say

12   that -- and he never testified that, given the transition

13   period, that what happened at the site was below any standard

14   of care. In fact, he did testify on cross that what he saw at

15   the site and the memos were what he would expect to see from an

16   environmentally zealous company that was trying to get a handle

17   on what was going on.

18   And, in fact, even the issue about groundwater

19   monitoring, there's no evidence about what the standard of care

20   was and that we were below the standard of care.

21   And, frankly, there is no evidence we violated

22   anything in relation to the groundwater monitoring, which then

23   brings us to causation.

24   And, Your Honor, I'm not going to deal with the

25   issue of: Are we the cause? Forget about that issue. But

1　remember, we have -- they have to prove whose contamination is

2　the contamination that we're worried about right now. If the

3　contamination in the wells as of today didn't come from

4　Whittaker but came from Bermite, Whittaker's not responsible.

5　　　　　　And what the expert said was they had no opinion as

6　to whether or not Whittaker was the cause of the contamination

7　or whether Bermite was or even the people that were there

8　earlier. What they said was contamination from the property,

9　which would include both Ms. -- Dr. Trudell and, for

10　Mrs. Stanin, the 75 years of operation. There was no

11　particular focus on Whittaker.

12　　　　　　THE COURT: In your briefing, you may want to

13　address the issue of whose burden that is, where you have

14　multiple potential tortfeasors and the question is which party

15　actually caused the harm at issue, whose burden is it.

16　　　　　　MR. BLUM: Your Honor, all I will say is, as of now,

17　plaintiff hasn't asked for an instruction that says it's our

18　burden. The agreed-upon instruction is that it's their burden.

19　But we will address the issue.

20　　　　　　THE COURT: I am addressing it in the context of

21　your motion. So that will be relevant. And if it turns out

22　there is an instructional issue, we'll have to deal with that

23　separately.

24　　　　　　MR. BLUM: All right. The other thing as to

25　damages -- I talked about the restoration damages, but I want

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1   to talk about non-restoration damages.

2   The evidence presented at the case -- in this case

3   and what -- is that the VOCs are below the MCL. In the last

4   four to five years, they're below the State's public health

5   goal. And I think there was testimony from two of plaintiff's

6   witnesses -- the last plaintiff's witness that what the public

7   health goal is is the number above which there is a health

8   problem. And if it's below that number, there is no health

9   problem.

10   There is no damage from the VOCs. Nothing that the

11   VOCs done have caused anything.

12   At the -- in the motions that we heard prior to

13   trial, plaintiff argued, well, we're the water company and we

14   have the right to -- to serve water that is VOC-free. There

15   was no evidence to that effect in this case.

16   Mr. Stone didn't get up -- didn't testify. And

17   Mr. Abercrombie who testified for the district never said that,

18   as the water district, we have the right and we should be able

19   to -- to serve VOC-free water. In fact, he admitted that -- he

20   didn't believe there was any problem in the 11 percent of the

21   time that they served water with VOCs.

22   So absent even that argument, which I think is

23   fallacious, there is no argument that the VOCs have caused any

24   damage here.

25   Now, that brings us to the -- I think it's the

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1   third -- the fourth cause of action which is the one you talked

2   about, the negligence per se. A lot of the argument on the

3   prior ones overlap. But the ones that they talked about in

4   this -- in the Complaint, at least, CERCLA and RCRA and the

5   other federal statute can't be used. I think there's specific

6   case law on that.

7   For the Hazardous Waste Control Act, that came in in

8   1982.

9   THE COURT: You could just brief that to the Court.

10 I'm, as you saw, more focused on the Code sections. It's not

11 at all clear to me that the federal standards or the federal

12 law has any application to triggering negligence per se.

13   MR. BLUM: That's actually my argument, Your Honor.

14 We would agree with that, but we will brief it.

15   THE COURT: Yeah.

16   MR. BLUM: In terms of the next section, which I

17 think is the Health and Safety Code Section 25100, et seq.,

18 that's the Hazardous Waste Control Act. That didn't come into

19 effect until 1982. And there's no evidence, no -- that there's

20 been any violation. Nobody's testified that there was any

21 violation.

22   For instance, just because I've been litigating that

23 Act since the late 1980s, there's 25189.5 that deals with

24 illegal disposal of hazardous waste, but that would require

25 evidence that there was a disposal during our period. There's

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1 no evidence to that effect.

2   The HSAA wasn't passed until 1999. And

3 Porter-Cologne was --

4   THE COURT: Why don't you do this. Why don't you go

5 ahead -- I think you've sufficiently identified it. So let's

6 put it in your papers and --

7   MR. BLUM: Sure.

8   THE COURT: -- go on to the issue identification.

9   MR. BLUM: Right. Private nuisance, which is the

10 fifth cause of action. You have to show that we interfered

11 with a property right. No property rights have been shown to

12 exist here. Even the factory rights, which you can assume were

13 here but I don't think actually were, there's no argument of

14 interference since factory rights are only the use rights.

15   Harmful -- it's -- and I'm going now from the

16 CACI instruction. You have to prove it's harmful, indecent, or

17 an obstruction. At least as it relates to the VOCs, no

18 evidence. You also have to prove that, according to the CACI

19 instruction, that the defendant was either negligent, acted

20 recklessly, or intentionally. There's no evidence of that.

21 And it causes substantial interference. No evidence as to

22 VOCs, at least. And we believe as to -- they probably have it

23 for the 205 on the perchlorate, but I want to reserve that --

24 when I say they "have it," I mean they have it enough.

25   THE COURT: I understand, in the context of a JMOL.

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 1              MR. BLUM:  Right.

 2              And in terms of the failure to obey argument, which

 3    is -- it's a joint jury instruction, 33.  They have to prove,

 4    one, that we knew of the risk -- no evidence of that -- and

 5    that reasonable steps were not taken.  And there's no evidence

 6    that we didn't act reasonably.

 7              The sixth cause of action, which I think is public

 8    nuisance, a lot of the same issues as the prior nuisance claim.

 9    But they've got to show wrongful acts, which they can't.

10    Again, the harm.  And specifically, I think it is issues 2, 3,

11    and 6 of the CACI instruction.

12              For trespass, first they've got to show that it's

13    property that we trespassed on, which they haven't shown.  They

14    do have to show negligence, and they do have to show harm.  And

15    at least as to the VOCs, there's no evidence of the harm.

16              I think that's fairly -- that should give the

17    plaintiffs a good indication of the issues we're going on.

18              What I will say, Your Honor, is in writing this, if

19    we see something else, we will notify them.

20              THE COURT:  All right.  Very well.

21              We're going to take a break for five minutes.  We're

22    just about done.  I do have a question about the successor

23    liability instruction.  But we'll take five minutes, come back,

24    complete that, and then I'll let you go.

25              (Break taken.)
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1   THE COURT: Please be seated.

2   We are remain on the record in Santa Clarita Valley

3   Water Agency versus Whittaker Corporation. We are outside the

4   presence of the jury.

5   Before I turn to successor liability, I don't

6   believe I provided the parties with any page limitations

7   concerning the JMOL. And I am going to limit that to 15 pages.

8   With regard to successor liability, the parties have

9   disputed a jury instruction in that regard. And it was not

10   entirely clear, Mr. Richard, whether that was intended as an

11   issue for the jury or for the Court or for both.

12   MR. RICHARD: Yes, Your Honor. Two things. We

13   drafted it not as an instruction but as a statement from the

14   Court as part of the instructions. So my colleague has done

15   the research and is prepared to argue this.

16   But the short answer is this is an issue for the

17   Court based on the pleadings in this case and can and should be

18   decided. But out of an abundance of caution, I did draw the

19   factual information from Mr. Lardiere.

20   So it's a question of judicial admission is the

21   short answer. And we believe the instruction, as drafted,

22   should be given.

23   This was -- came into the case at the eleventh hour

24   in one of our meet and confer calls when Mr. Trowbridge agreed

25   that -- in the statement of the case, that this would include

1   the Bermite period. And then Mr. Blum said, no, no. Hold on.

2   I want to think about that. And that led to this whole new

3   dispute about this whole period that we've been dealing with

4   from 1942 to 1967.

5   So I'm happy to go into the law on what it means

6   that they admitted that specific averment, et cetera, and my

7   colleague's prepared to do that. But our view is it should not

8   be a question to the jury. It should be the Court instructing

9   the jury they are the successor and here's what that means.

10   THE COURT: All right. And I have had a chance --

11   Mr. Blum, if you wish to very briefly address this. It is not

12   my intention to reach a conclusion at this point on the issue

13   but to see whether I understood the scope of it.

14   And I will tell you that I do think there's a very

15   serious question about whether there is a judicial admission

16   here. I know that you rely, in part, on information and

17   belief. That reliance strikes the Court as being somewhat

18   tenuous. I don't even know what you're relying on information

19   and belief on when you have the information.

20   And the Court is, as you might imagine, quite

21   familiar with the concept of information and belief and when

22   that is appropriately used. It is appropriately used by the

23   plaintiff when the information is really only known to the

24   defense. It's not appropriately used by the defense when the

25   information is with the defense.

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1   Typically when you are unable to admit something,

2   you deny it. You don't admit it on information and belief.

3   And the only case law that has been presented is quite tenuous,

4   in my view.

5   MR. BLUM: Your Honor, at this point, I'm not going

6   to argue with the Court because this -- because I forgot to

7   give one issue that we are going to deal with in the -- in the

8   motion. And it actually makes the issue of successor liability

9   irrelevant.

10   THE COURT: All right.

11   MR. BLUM: Assuming we are the successor, plaintiff

12   would still have to prove that during -- that Bermite or the

13   prior owners of the property acted negligently, independently

14   negligent in order to make Whittaker liable for their

15   negligence, which means that plaintiff would have to establish

16   the standard of care when Bermite occupied the site and show

17   what Bermite specifically did and so on and so forth.

18   Zero evidence of the standard of care prior to 19 --

19   well, 1980, I believe.

20   THE COURT: All right. Very well.

21   I believe that concludes the issues that the Court

22   intended to address at this point. So unless there's anything

23   further, I will order the parties back at 8:00 o'clock on

24   Monday.

25   Let me hear from you, Mr. Richard.

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 1              MR. RICHARD:  Thank you very much.

 2              As I said, we reserved -- with respect to a few

 3    exhibits -- and I just want to be clear and there's -- it was

 4    my understanding that the exhibits that we showed Dr. Najm from

 5    his report were, in fact, coming into evidence.  That was the

 6    stipulation.  It was not limited to demonstratives.  And -- but

 7    Mr. Blum just raised an issue with that.

 8              THE COURT:  All right.

 9              MR. RICHARD:  So I feel the need to move those into

10    evidence at this point so there's no ambiguity.

11              And then there's one other issue.

12              THE COURT:  All right.  Let me hear, first,

13    Mr. Blum, what the objection is.

14              MR. BLUM:  Your Honor, I was incorrect when I asked

15    Mr. -- when I talked with Mr. Pat- -- Mr. Richard about it.  We

16    had agreed.

17              THE COURT:  You need to speak into the microphone,

18    please.

19              MR. BLUM:  Your Honor, we had agreed that they go

20    into evidence.

21              THE COURT:  All right.  They will be received.

22              MR. RICHARD:  And the other issue, at a point in

23    time where the Court had directed that publication could result

24    in, you know, admission of a document, I didn't raise an

25    objection when Mr. Blum showed to Dr. Hughto page 4 of his
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1   expert report. And this was not a table or some demonstrative.

2   This was a long page of text.

3   And the Court may recall, he had him read the top

4   sentence. Then Dr. Hughto said, Well, it actually starts on

5   the preceding page where I cite the source. So this wasn't --

6   and so at that point, I thought the entire exhibit was coming

7   into evidence.

8   And so, certainly, by publishing that page of text

9   to the jury, that page and the preceding page should -- should

10 come into evidence would be our view.

11   THE COURT: So the request is that the exhibit,

12 essentially, be pared down to those two pages and that those

13 two pages of his report be received?

14   MR. RICHARD: Yes, Your Honor, unless there's some

15 reference. I don't believe there is, but we would redact any

16 reference to the search warrant. That's not my purpose. But

17 it's the completeness of those two pages that we believe has

18 fairly been opened.

19   THE COURT: Remind the Court of the exhibit itself.

20 I do remember the discussion.

21   MR. RICHARD: Yes, Your Honor. It's Exhibit 1305.

22 It's his expert report.

23   THE COURT: Is there an objection to the receipt of

24 those two pages as properly redacted, to the extent they refer

25 to search warrants or criminal investigations?

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1   MR. BLUM: Yes, Your Honor. We didn't -- we did not

2   show the two pages. I read in the line, and then Dr. Hughto

3   referred to the part before. It was read in, it wasn't shown

4   to the jury.

5   So if they want to do that, those two sentences, I

6   have no problem.

7   THE COURT: If they want to do what with those two

8   sentences?

9   MR. BLUM: If they want an exhibit that includes the

10   sentences that were read to the jury from the report, I am fine

11   with that. But the two pages were never shown to the jury.

12   THE COURT: All right.

13   MR. RICHARD: Just real briefly, if I may respond so

14   we have an accurate record, Your Honor.

15   THE COURT: Yes.

16   MR. RICHARD: Mr. Blum's recollection is incorrect.

17   I'm reading from the transcript at page 11, 1:21 p.m.:

18   *"MR. BLUM: It should be on the screen right now.*

19   *"All right. Here --"*

20   THE COURT: I don't think you need to read on. I

21   actually have a specific recollection of seeing this.

22   MR. RICHARD: Okay. Thank you, Your Honor.

23   THE COURT: I seem -- and it's possible that I'm

24   mistaken. But the transcript says what it says, and so you

25   could take a look at the transcript. But I happen to have a

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1   recollection of Dr. Hughto then saying, well, it goes back to

2   the prior sentence. And I think he read the prior sentence to

3   the jury while on the screen, was only the page that did not

4   contain that particular sentence.

5   But the transcript will say what it says. Let's

6   assume it says what Mr. Richard says it does. Tell me why I

7   shouldn't just allow both of those pages.

8   MR. BLUM: Because it was only -- the only part that

9   the jury was directed to were those two lines, and it was for

10   the purposes of impeachment.

11   THE COURT: Is there any prejudice that you see with

12   respect to other information on those two pages?

13   MR. BLUM: Your Honor, I don't remember everything

14   that was on the screen. If I could take a look right after

15   court and I will tell counsel.

16   THE COURT: All right. Just real quickly,

17   Mr. Richard, if that's the only purpose that you want it in

18   for, why shouldn't I just provide these two sentences to the

19   jury?

20   MR. RICHARD: Um, the Court will recall there were

21   other questions about the report, um, about its completeness

22   and the materials relied on. I'd have to also go look back at

23   those two pages. But at the time I thought, he's publishing

24   it, it's in.

25   THE COURT: Here's what I'm going to do. I'm going

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1 to allow you to put in those two sentences, essentially, for

2 the jury. I assume the only reason you're going to want to do

3 this is to the extent it's relevant to your closing argument.

4   MR. RICHARD: Yes, Your Honor.

5   THE COURT: They're not going to remember what those

6 two sentences said.

7   So to the extent it's useful to you, that you want

8 to have those two sentences, put those two sentences, redact

9 everything else, and 1305 will be so admitted without objection

10 by the defense, based upon what I heard from Mr. Blum.

11   If you're seeking to expand beyond that, I'll hear

12 from you on Monday morning. But please have a good reason --

13   MR. RICHARD: Thank you, Your Honor.

14   THE COURT: -- if you're looking to do that.

15   MR. RICHARD: Yes.

16   THE COURT: Are there any other exhibit issues,

17 Mr. Richard?

18   MR. RICHARD: Not that I'm aware of. I haven't seen

19 the final reconciliation. So by Monday morning, I think -- I

20 think we're set, but if I could just reserve until Monday

21 morning. So I haven't seen the latest list, Your Honor.

22   THE COURT: All right. And one thing before I let

23 you go is with regard to your submission on the opposition to

24 the JMOL, I'm assuming you're going to respond to the issues

25 that are being raised. So this may be superfluous.

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 1              But I would want to hear, among other things, the

 2   response to the issue of the standards of care over the course

 3   of time.  I'm recalling that you have an opening statement that

 4   went through various historical understanding and you had

 5   Dr. Hughto or someone who also spoke about that.

 6              I don't mean to elevate this as an issue more

 7   important than other issues but, since it's last on my mind, I

 8   want to make sure that you are addressing it.

 9              MR. RICHARD:  Yes, Your Honor.  Thank you.

10              THE COURT:  Before we conclude, anything further,

11   Mr. Richard?

12              MR. RICHARD:  What's the timing on our opposition?

13   If we get their papers Sunday at noon, do we have until Monday

14   close of business?

15              THE COURT:  That's fine.

16              MR. RICHARD:  Thank you.

17              THE COURT:  All right.  And anything further before

18   I let everyone go?

19              MR. BLUM:  Your Honor, we -- I think we gave them

20   documents relating to six witnesses last night and they gave us

21   the documents.  Frankly, we're -- I think if we discuss

22   something probably Friday, we can cut down extremely

23   significantly the number of documents that are in dispute.  It

24   was just a question of time.

25              THE COURT:  All right.  And so let me see how that
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1 | translates for the Court. So you have provided the Court now

2 | with -- you're suggesting more challenged documents than --

3 | than you think the Court's going to have to resolve upon

4 | further discussion. What do you anticipate having on Friday?

5 | MR. BLUM: Well, I was going to propose Friday, and

6 | I assume that we will have it -- we can have it on Friday.

7 | THE COURT: Why don't you do this. Why don't you

8 | communicate to the Court's chambers e-mail the results of your

9 | discussions and I'll hold off. Is this with all of the

10 | witnesses that you're going to do this or any particular

11 | witness so that I -- I know what I should and shouldn't look

12 | at?

13 | MR. BLUM: Can -- can, actually, Mr. Richard and I

14 | have five minutes after the Court --

15 | THE COURT: Why don't you do this. Why don't you

16 | have a discussion. That's a good idea. And then just report

17 | whatever the accompanying results are to Mr. Cruz who will then

18 | communicate it to the Court.

19 | All right. We're in recess. Have a happy holiday,

20 | everyone. We'll see you on Monday morning. Thank you.

21 | (Proceedings adjourned at 11:14 a.m.)

22 |

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UNITED STATES DISTRICT COURT

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CERTIFICATE OF OFFICIAL REPORTER

COUNTY OF LOS ANGELES   )
)
STATE OF CALIFORNIA   )

             I, MYRA L. PONCE, FEDERAL OFFICIAL REALTIME COURT

REPORTER, IN AND FOR THE UNITED STATES DISTRICT COURT FOR THE

CENTRAL DISTRICT OF CALIFORNIA, DO HEREBY CERTIFY THAT PURSUANT

TO SECTION 753, TITLE 28, UNITED STATES CODE THAT THE FOREGOING

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THE TRANSCRIPT PAGE FORMAT IS IN CONFORMANCE WITH THE

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                     DATED THIS 25TH DAY OF NOVEMBER, 2021.

                     /S/ MYRA L. PONCE
     _____
                MYRA L. PONCE, CSR NO. 11544, CRR, RDR
                   FEDERAL OFFICIAL COURT REPORTER

UNITED STATES DISTRICT COURT

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$200,000 [1] - 1183:17

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'21 [3] - 1192:3, 1192:6, 1192:16
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